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PACIFIC FISHERMAN

September 1960

58(10)

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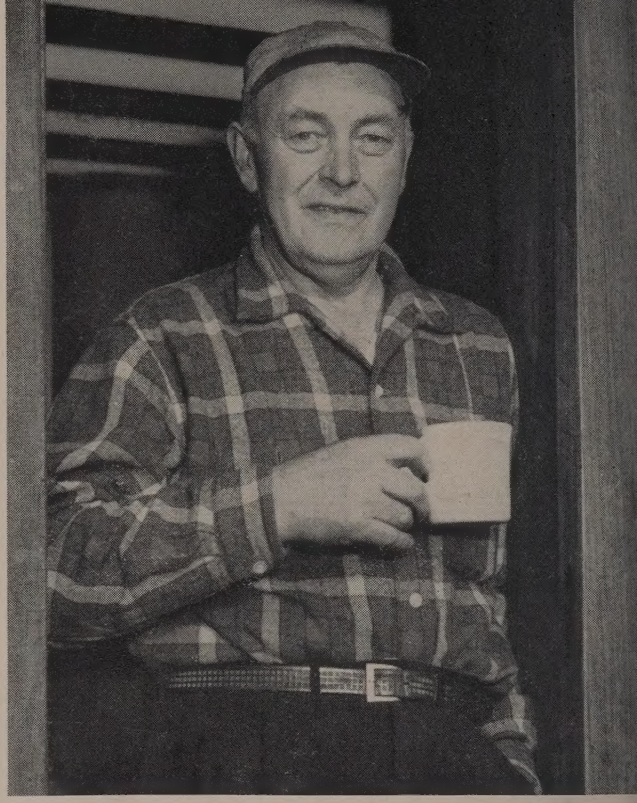

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Vol. 58 **No. 10**

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We are proud to introduce: PACIFIC FISHERMAN INTERNATIONAL

● Significant change in *Pacific Fisherman* comes with this issue, Vol. 58, No. 10. It is a change which domestic readers of the journal will not note, other than through the words of this announcement; but it is a change which will be of wide importance to fisheries producers, operators, management and marketers throughout the world—and to those who seek to sell and serve them.

Without curtailing or modifying *Pacific Fisherman* in content or policy, a special section will be added to all copies of the journal going outside the United States, and the expanded publication distributed to other countries will be named—appropriately—*Pacific Fisherman International.*

● The specialized editorial material comprising this added international section to a considerable extent will be analytical and interpretative, seeking to show the international significance of facts presented fully elsewhere in the issue.

In short, the reader of *Pacific Fisherman* will receive practically all of the factual information which appears in *Pacific Fisherman International,* while the overseas reader of the international edition will find in that edition, in addition to full factual reporting, objective interpretation of these reports and their significance to the fishermen of all nations, to fishing as a world industry and to those engaged in it, whatever their nationalities and wherever they may fish.

● A substantial part of the specialized material in *Pacific Fisherman International* will be in the Spanish language, again designed to provide broader utility of fishery fact, rather than a substitute for material published in one edition and not in the other.

We are able to provide this Spanish language treatment on a basis of analytical commentary through the linguistic and editorial abilities of Raul Rodriguez, *Pacific Fisherman's* associate editor in Southern California and Latin America. Guatemala-born of Spanish parents, he has had many years of editorial training and close contact with the fisheries of the Americas.

He will write in Spanish for *Pacific Fisherman International* with all the intelligence, ability and objective journalism which for years have marked his reports in English from his specialized editorial field.

● Summing up our new project, its objectives and opportunities:

1. With issue No. 10 of our 58th year *Pacific Fisherman* expands its service to include a new edition, *Pacific Fisherman International.*

2. This will go to a greatly expanded readership in all the world's leading fishing countries outside the United States.

3. It will be published in English, but will include interpretative reports in Spanish.

4. *Pacific Fisherman* will continue unchanged in character and coverage; but *Pacific Fisherman International* editorial will be designed to develop and interpret reported material of particular significance in world fisheries.

5. We seek through this means to serve comprehensively our growing readership through the world's fisheries.

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Heavy Tuna Landings Put Check on Imports

● At end of August there were some signs of weakening in the prices of Yellowfin and Skipjack tuna in San Diego and San Pedro.

Albacore fishing was excellent, the purse seine fleets were bringing in better-than-normal catches of Yellowfin, and the canners seemed to have plenty of raw material on hand.

Under these pressures, even the flow of imported frozen Yellowfin slowed down to a trickle. Quoting a Japanese fishing trade publication, the Market News Service of the U. S. Bureau of Commercial Fisheries reported that no sales contracts were being made with Japanese suppliers even at prices $10 below the official figures.

One Terminal Island canner late in August offered prices below the current levels of $250 a ton for Yellowfin and $210 for Skipjack, but as this was written no sales of fish had been made at the lower figures, and other canners were unloading fish at $250-$210.

At the moment, the prices seemed to be holding, but it is possible that a new price basis, possibly involving an entirely new method of pricing, may be developed.

● Meanwhile, 1960 fishing luck continued to beat 1959 on all fronts.

For the year 1960 up to August 13, the combined California fleets had caught a total of 84,973 tons of Skipjack and Yellowtail combined, as against 84,063 tons up to this time last year. But the 1960 catch consisted of 67,748 tons of Yellowfin at $250 a ton, whereas in 1959 the Yellowfin landings were only 42,409 tons. Dollarwise the fishermen were considerably better off this year so far than last, when their catches were almost half Skipjack at $210 a ton.

In spite of rough weather and a tie-up of several days in July, the Albacore boats were doing fine. During the week ending August 13 the San Pedro boats landed 1630 tons, compared to 1432 tons the same week last year. In San Diego, although the catch was smaller, the percentage difference was enormous — 237 tons caught during the week in 1960 as against 40 tons last year.

The cannery pack of Albacore for the year up to mid-August was 1042 cases, compared to 776 cases last year. Light-meat packs were holding up pretty well, 5965 cases in 1960 compared to 6288 in 1959, according to the Market News Service and California Fish and Game Department.

Southern Sardiners Start At Opening for $35 Price

● For the first time in many years, sardine fishermen of Southern California were out fishing as their season began on September 1.

In previous years, prices offered by canners have been lower than fishermen have felt like fishing for, and they have lost the early-season fishing.

This year, however, the prices of around $35 a ton offered by canners have proved satisfactory to the fleet, and the Southern fishermen (south of Point Arguello) were on the fishing grounds as the first day of the season dawned.

● Before the beginning of the sardine season, mackerel fishermen were again fishing after a tie-up which lasted since early April when the fleet stopped fishing because no orders were forthcoming from canners on Terminal Island. Mackerel prices, like those for sardines, were around the $35-per-ton level.

The canneries were accepting fish on quota—40 tons per night per boat for sardines, 20 tons per night per boat for mackerel or for mixed mackerel-and-sardine catches.

With orders again coming for mackerel, the mackerel boats sailed early in August to resume fishing.

Forecast: Fair

● The annual sardine forecast made by the California Department of Fish & Game was for a fair, but not spectacular, season.

Basing their prediction on the sardine population as observed on test cruises, on the number of eggs spawned and on other factors of fish supply and ocean conditions, John Radovich of the Fish & Game Department and Dr. E. H. Ahlstrom of the California Co-Operative Fishery Investigations joined in "guessing" that the *available* population this season would be around 300,000 tons of sardines.

This forecast was given to the Marine Research Committee at a meeting in late July by Mr. Radovich. However, like a good scientist, he qualified his prediction by pointing out some factors that might change the actual result from what he predicted.

If ocean-water temperatures turn colder, Mr. Radovich said, the sardines were apt to go South to warmer climes—and nobody can predict ocean temperatures, he pointed out. On the other hand, if the fish move in close

California Imports of Frozen Tuna

Cumulative data in tons for 1960 through Aug. 13, and for other years to the nearest comparable date. Data from U. S. Market News Service

	Albacore	Skipjack	Yellowfin	Unclassified	Total
San Francisco	1,428	260	6,725	417	8,830
San Pedro	9,445	5,082	17,908	126	32,561
San Diego	2,627	747	957	17	4,348
Total to Aug. 13	13,500	6,089	25,590	560	45,739
1959	8,585	5,392	37,821	160	51,958
1958	10,493	3,023	30,600	328	44,444

to shore and remain available to the boats, the total season available catch might possibly go over 30,000, although Mr. Radovich did not consider this likely, only possible. It's more likely, he said, that the total tonnage will be less than 30,000.

Mr. Radovich also declined to predict market conditions, which may cause canners not to take the full available catch even if they could have it.

Mackerel Turn Coy

● The mackerel fishing in Southern California waters was up and down. When the boats first went out, early in August, they encountered two weeks of good fishing and brought in 1520 tons of Pacific mackerel. Then the fish turned shy, and for two days in the third week of continued fishing, only 50 tons were landed on Terminal Island.

Dr. Ole Mathisen Wins Soviet Exchange Appointment

Dr. Ole A. Mathisen, long Bristol Bay project leader of the Fisheries Research Institute of the University of Washington College of Fisheries, leaves this month for the Soviet union where he will study fisheries biology for a year under a program of exchange with the U.S.S.R. Dr. Mathisen did not engage in the Bristol Bay research program this year for the first time in many years, devoting the summer to Russian language studies.

He will be the second F.R.I. biologist to go to Russia under the program, as Dr. Donald E. Bevan, Kodiak project leader, went to the Soviet Union a year ago for study. He expects to return to the United States in November.

Salmon Supply Picture Brightens Despite Shortage in S.E. Alaska

● North America's salmon supply enters the fall selling season in much more adequate condition than seemed possible early in August.

This is due to the persistent August trend of production maintained in Alaska districts other than Southeast Alaska and Prince William Sound.

British Columbia closed August in far better position than had seemed possible a month before. A good pack of Chums would go far toward applying a general correction.

● *Pinks were still the problem* at press time, although in Alaska they were above Chums for the first time this season. As this issue closed it appeared certain the state's Pink pack would be narrowly above 600,000 cases, and not far off from 1959's final figures of 637,700.

In the Pink areas Kodiak Island was the bright spot, just as Prince William Sound and Southeast Alaska were the grave disappointments. As a matter of fact, the island district production was very close to the five-year average, although far below the big year 1955.

Cook Inlet, with above average packs in all species save Kings, did very nicely, thank you.

Prince William Sound, whose Pink pack soared to 296,000 cases in 1958, was down to 70,554 cases in a bewildering debacle.

Chignik had its best pack in a number of years, with Reds particularly strong and accounting for 46,500 cases out of the all-species total of 98,740.

South Peninsula shared Chignik's good fortune, and according to much the same pattern, with 61,000 cases of Reds, the best pack of this species in recent years. Chums were long with 112,000 cases and Pinks above average. As a matter of fact, the South Peninsula's pack of 245,200 cases was *good,* by modern standards, and well over twice the 105,600 cases packed there in 1959.

● You can find no cause for cheering in the Southeast Alaska record.

This season was a crippler, with a mid-August total of 217,234 cases, and only 93,117 cases of them Pinks —and this from a district which produced 2.1 *million* cases of Pinks alone in 1949, and whose 10-year average pack of Pinks is almost 600,000.

Puget Sound Sockeye Pack Approximates 100,000 Cases

● With an American catch of 1,162,000 Sockeyes of about average size, it is easy to figure a pack of about 100,000 full cases. This is just about what was forecast for the weakest year in the four-year Fraser River cycle.

An interesting aspect of the Puget Sound operation was the remarkable extent to which the fish went into quarters.

At time of writing the fall fishery for Silvers and Chums was only just commencing, and had at closing time no evidence of prospective volume. However, Cohoes all along the coast had been scarce, save for Cook Inlet, and there was little reason to expect improvement.

Sales to Japan Doubted

● Despite the fact that at least three Japanese salmon concerns secured authority from their government to buy and import into Japan frozen Red salmon from the United States for canning and export to Europe, it appeared at the end of August that no such fish actually had been shipped.

At presstime there was still a possibility that a nominal amount of such business could be consummated.

Whether there ever was likelihood that any substantial volume of frozen Reds would be shipped to Japan is still a point of argument in Seattle. Some point to the fact that deals were reported, prices named, and fish inspected. This is known.

Others see in the announcements and inspections political stage setting for commercial moves in another year when renewal might be expected of the forestalled efforts of American enterprisers to deliver fish to the Jap-

anese on the high seas off Alaska.

Weather Delays Loading

● While the weather during the heavy run on Bristol Bay was excellent, and too fair and warm if anything, storms during the last days of July and early August imposed a severe handicap on cannery crews, seeking to get their precious salmon aboard the steamers lying at Ship's Anchorage.

Much of the pack had been loaded on power scows by the time that the weather turned bad. Conditions were such that the scows could not lie alongside the freighters to transfer cargo; and even at the canneries the cased salmon was kept dry only with the greatest effort, and some of it had to be re-cased.

Nushagak Pink Resource Dwindles Once Again

● Pink salmon were disappointing over much of their range during the 1960 season, and one of the most disappointing experiences was associated with a run which actually was well above normal.

Thus the 11,854 cases of Pinks produced on Bristol Bay was far above average for this species in that area; but it was a bitter disappointment nevertheless because the run fell so very far short of that in 1958.

In that year about 63,000 cases of Pinks were packed on the Nushagak when an unanticipated run of Pinks appeared. Fishing Pinks with Red nets, the resident fishermen got only a fraction of the run. Spawning escapement to the Nuyakuk was exceptionally heavy — and this year everyone was equipped with Pink nets.

The run came, but in volume far, far below that of two years before.

What caused the failure of the 1958 run to reproduce itself is not known. Perhaps the answer lies in the "exceptionally heavy" spawning on the Nuyakuk. In any event the scant yield of Pinks was a bitter disappointment, albeit one which the great abundance of 1960 Reds made it possible to bear.

Pink salmon nets operated in the Bristol Bay area during the latter part of July are said to have taken a good many very small Reds which ran as many as 27 to the case, and certainly would not be profitable if bought at full price.

ADF Regulatory Policies Continue Geared to Realism

● Regulatory policies of the Alaska Department of Fish and Game continued to win general approval of the salmon industry even where they were sharply restrictive, as in Southeast Alaska, with its disappointing catches.

There had been doubt if the rich praise given ADF for its performance on Bristol Bay during the big Red run would be repeated when fish were scarce and control stringent. Certainly it is hard to be enthusiastic when you're hurting, but the industry generally felt the ADF policies in Southeast Alaska were fair and realistic under adverse conditions.

Limitations on early fishing secured escapement while it was being determined that no heavy run existed or was promised. Then as disappointment multiplied specific closures and fishing periods were balanced to permit escapement while maintaining contact with the fish sufficient to permit harvesting any run which might develop.

Clarence L. Anderson, ADF commissioner, stated the policy plainly:

"It is our intention to allow short weekly fishing periods in Southeastern Alaska as long as there is any possibility of a late run developing. With the present short weekly fishing periods and the long closures between open periods, adequate escapement is assured in most areas. Surveys by department biologists indicate where escapement is inadequate, and in these areas, additional closures have been provided."

What About the Escapement?

● While it is still too early properly to assess salmon escapements, particularly in Prince William Sound and Southeast Alaska, Alaska's Department of Fish and Game appears confident that there were *fair* early escapements in both of these problem areas.

In particular, Prince William Sound's early run seemed to get into the streams. This is particularly true of the streams of the outer islands screening the Sound, streams which sometimes receive few or no Pinks.

Thus again the inconstancy of Pinks is emphasized and the Homing Instinct brought into question so far as this smallest species is concerned.

Never Forget for a Minute the Hazards As Well as the Opportunities in Salmon

● Realities of salmon canning as a hazardous business were being written in red ink on a score of ledgers in August while the public press was publishing golden stories of fishermen rolling in riches from July's big run on Bristol Bay.

True, there were handsome earnings among Bristol Bay gillnetters and setnetters; *but how long ago was it that Alaskans of the Bristol Bay area were calling on the Federal government for relief to keep them from starving?*

True also that some companies got up excellent packs of Red salmon on Bristol Bay, but they were packs put up at high cost because the salmon were small and bought by the piece.

But even more importantly it is true that most of the Bristol Bay operators also have canneries in Southeast Alaska, where the catch was a bitter disappointment and the losses ate up the possibilities of profit from the big run to Westward.

When you go into the salmon business, whether as a fisherman or packer, you are entering a hazardous field, where the losses can be heavy and the gains can be high—and where sometimes they cancel each other.

● Like every Bonanza, the big year on Bristol Bay and the tales of thousands earned on a tide will stir the imaginations of men unfitted by training, by stamina, by courage, by resources. *For men like that the salmon business isn't even a gamble. For them it's a sure defeat.*

Japanese Catch Herring Readily in Bering Sea

Operating on Bering Sea herring for the first time—following the release of herring on the high seas off Alaska from the abstention provisions of the International North Pacific Fisheries Treaty — the Japanese *Shinyo Maru* fleet enterprise apparently has had no trouble in taking satisfactory catches with mid-water trawl gear.

The vessel reported that early herring were small, but that as July advanced catches of about 25 tons daily were made of excellent herring of 6 or 7 years age class.

The vessel also had a good catch of King crab, plus substantial quantities of flounder, cod arrow-toothed halibut, rockfish and other species.

CUMMINS MARINE DIESEL USER REPORT

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SOCKEYE BULL'S-EYE—

Another Salmon Forecast Lands Squarely on Target

● Uncanny accuracy of the Fisheries Research Institute's Bristol Bay forecast for 1960 was matched by that made for the Fraser River Sockeye run by the staff of the International Pacific Salmon Fisheries Commission.

In December, 1959, Loyd A. Royal, director of the international enterprise, forecast: "The allowable catch of Sockeye will be a minimum of 2,000,000 fish, to be divided equally between the fishermen of the two countries." (*Pacific Fisherman, Jan.,* 1960, *Page* 17).

The catch at presstime, with the run virtually over, was: United States, 1,162,314; Canada, 1,267,867.

In addition, the escapement, so far as it could be enumerated at that time, was rated by the commission staff as entirely satisfactory.

● To the first of August at least the situation was decidedly discouraging, and it was not until Aug. 3 that it looked up for the Canadians, and Aug. 7 for the Americans.

From then on the catch built up rapidly as the full Chilko run moved in from sea, again almost a week after the usual timing; and with a curve of abundance departing substantially from the normal sharp-peaking Chilko pattern.

Canada mounted a powerful fleet at the entrance to the Strait of Juan de Fuca, and for a time went rapidly ahead in the fishing, with catches for both Canadian areas of 192,000 fish Aug. 3; followed by 110,000 on the 8th and 198,000 on the 9th.

Fishing by both fleets, particularly during the early part of the season, was characterized by the relative ineffectiveness of the purse seines as compared with gillnets. This reversed a condition which had prevailed for the two previous years. This year the gillnets seemed particularly deadly, and there was a strong build-up of this gear in the Canadian waters of the Strait, both in the vicinity of Sooke and in the Bonilla area.

American reef nets also were definitely effective; but toward the end of the season the seines recaptured their old ability to some extent. However, close observers of seining reported that there was a sharp variation between boats, and that good catches were either the result of good fortune or smart fishing on the part of the skippers. Hard work wasn't enough if it was applied only in the traditional areas of the Salmon Banks and Point Roberts.

● Run of Sockeye prior to the opening of the main season July 18, when it was being fished to only a limited extent by the Fraser gillnet gear, provided a satisfactory escapement of the Early Stuart race, which had been the objective of the limited fishing during the first part of July.

FRED MATHERS retired in August as a Canadian member of the International Pacific Salmon Fisheries Commission, where he has served four years as a most effective force. One of the leading fruit and vegetable canners and freezers in Canada, he spent his early years as a businessman in the fisheries of British Columbia. As a member of the Salmon Commission he served Canada and the United States alike in fairness and intelligence, and with wise-use conservation of the Fraser River Sockeye ever the first consideration.

The Chilko run, which provided at least 75% of the total catch, was late in arriving, but the extended weekly closures, and their timing, let the fish go through in steady flow from the peak of the run. This escapement was aided by the relatively low effectiveness of the American gear.

Nearing the middle of August the percentage of Chilko fish in the run began to decline, as did the total volume of movement. Desiring to secure escapement of at least half of the late season races, which tend to be weak, the commission closed American fishing Aug. 13. At that time the American fleet was about 200,000 ahead in catch and the administrators sought to equalize the catch between the two countries by adjusting the fishing periods in the river in the light of catch, and of escapement to the areas in special need of seeding.

● Final estimate figures for the Chilko escapement were not available at presstime, but it was believed they would exceed 500,000 fish, which is considered about the upper limit of desirability on this cycle.

Migration route of the Fraser River Sockeye during the 1960 season was normal, with only a very small percentage coming through Johnstone Strait.

The moderate tardiness of the Chilko migration, which arrived late in the Strait of Juan de Fuca and continued in some volume for at least a week beyond its scheduled effective termination about August 10, has not been ascribed to any specific cause. Other races composing the 1960 run followed the accepted time table more closely.

Oregon Fish Commission Advances Two Officials

L. Dean Marriage, who served four years as chief of the water resources section of the Oregon Fish Commission, in August was appointed assistant director by Robert W. Schoning, who succeeded A. M. Day as director.

Taking over the water resources post is William D. Clothier, who for two years has been fisheries biologist in charge of coastal rivers.

Nichiro Gyogyo K.K. Oyster Plant at Hiroshima, Japan, is recognized today as standing without a peer among the world's establishments for processing oysters. A dock will replace the barge at the right this fall. Oysters enter the structure on the conveyors shown, where they are washed in antiseptic water. As they pass beneath the tower, flake ice is drawn onto the belt with them. Oysters mixed with ice are stored in the building with ventilators adjoining the tower. Upper floor of the two-story structure at the left rear is devoted to cafeteria, employe facilities and storage. The freezing and cold storage department is on the lower level, extending across the base of the U-shaped structure. The canning department is in the structure at the right.

Nichiro Enters Oyster Industry With World's Most Modern Plant

● Rated widely by competent observers as "the finest and most modern oyster-packing plant in the world," the newly-built, fully integrated oyster freezer and cannery of Nichiro Gyogyo Kabushiki Kaisha went into preliminary operation at Hiroshima, Japan, late in the spring.

With the return of the oyster harvest season this autumn, the plant will go into full operation both in canning and freezing. Its frozen product is expected to develop wide interest, for it is as modern as the plant in which it is packed. This innovation, in which this plant is believed to be the world pioneer, consists of individually frozen oysters, each in its own compartment formed in impervious polyethylene.

Canned and frozen oysters from the Nichiro plant are being marketed throughout the world by the Coast Oyster Co.'s sales outlet under its *Willapoint* brand, widely known in the United States.

● Nichiro Gyogyo K.K. is generally recognized as the leading factor in Japanese salmon canning, an industrial field in which it pioneered, and to which its corporate attention has been primarily devoted for many years.

Seeking diversification, and particularly in a field which would result in fuller and more productive utilization of Japan's domestic resources, while making a significant contribution to the national economy and export trade, Nichiro decided to enter oyster packing. Here was a field which seemed to satisfy all requirements, and in which Japan's coastal waters appear to offer virtually unlimited potential for growth through expansion of oyster culture.

● With this diversification decision made, Nichiro entered into negotiations with Coast Oyster Co., which for more than 30 years had developed its oyster business on the Pacific Coast of the United States, basing it on seed imported from Japan and grown in the United States. For several years Coast had been interested in the Hiroshima district, Japan's leading oyster-producing area, as a source of prime oysters of small size, ideally suited to individual freezing by a method the company had developed.

From the discussions between the two companies came an agreement under which Coast was to provide technical guidance in plant design and equipment; and in the field of sanitation and quality control. Coast also was to become the exclusive world-wide distributor of the oyster products of the Nichiro operation.

● Nichiro takes the historic step of diversification into oyster packing under the leadership of T. Hiratsuka, chairman of its board, Koichiro Kobayashi, president, and T. Tagami, its

Features Oysters Individually Frozen in Impervious Polyethylene Pockets

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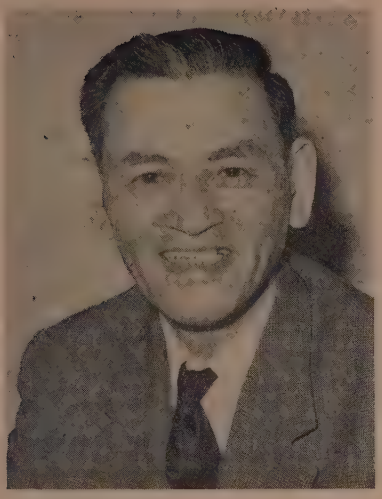


K. KOBAYASHI, president of Nichiro Gyogyo K.K. and its chief executive officer, is known throughout the world as a respected leader in Japan's vital fisheries.

vice president and former managing director. All three are known throughout the world for their contribution to Japan's fisheries and their roles in the development of their nation's marine economy.

Mr. Hiratsuka, for many years Nichiro's chief executive officer, is recognized as the dean of Japan's fisheries. Mr. Kobayashi has spent his entire adult life with Nichiro, advancing through the ranks of the company to its presidency. He is currently a member of the International North Pacific Fisheries Commission.

Mr. Tagami, who recently advanced from managing director to vice president of the company, has also spent all his life in the fishing industry. His activities in recent years have been a stimulating factor in the growth of the company, as well as in the fishing industry of Japan. He was succeeded as managing director by T. Maehara.

S. Kamimura, a director of Nichiro, is in charge of the company's oyster activities.

Coast Oyster Co. is headed by Verne Hayes as president, and it was he who personally conducted the negotiations with Nichiro. In addition to the Hayes interests, important positions in Coast Oyster Co. ownership are held by the Van Camp Seafood Co. and Rupert Fish Co., a wholly owned subsidiary of British Columbia Packers, Ltd.

Mr. Hayes gave close personal attention to the Nichiro plant during its construction, and Joseph W. Engman of the Coast staff was in residence at Hiroshima for the eight months the work was under way; while Malcolm Edwards, whose duties as chief of Coast's oyster seed operations require him to be in Japan most of the year, devoted much time to the Hiroshima enterprise.

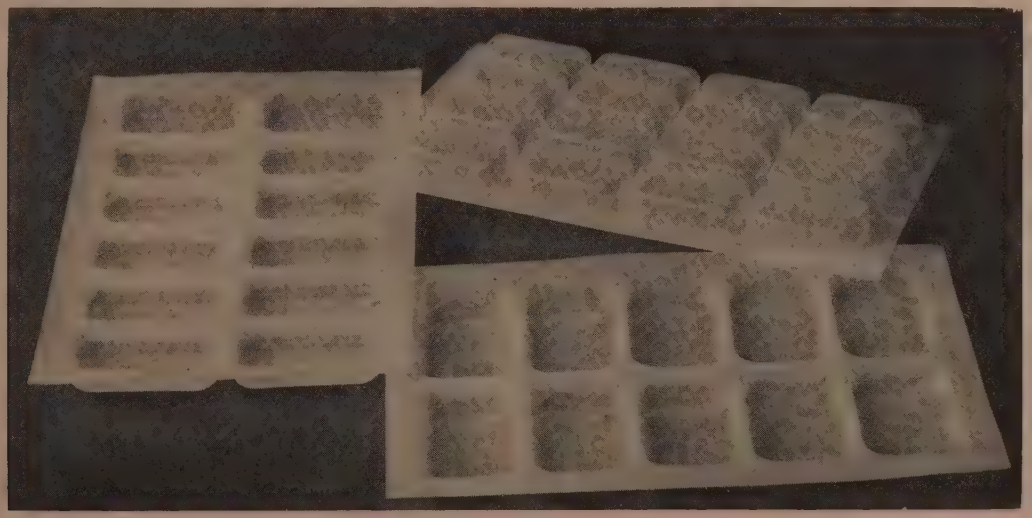
● Hiroshima was decided upon as the location for the Nichiro diversification into oysters because (1) the prefecture is the largest oyster producing area in Japan, and thus was capable of supplying the very large requirements of the enterprise; (2) Hiroshima oysters are considered of specially fine quality; (3) the prefectural government was prepared to cooperate fully in the promulgation and enforcement of a shellfish sanitary code designed to comply with or exceed

T. TAGAMI, vice president of Nichiro Gyogyo K.K., with special responsibility for its diversification into oysters.

the most stringent requirements of any country in the world.

Oyster supply for the plant comes from the extensive oyster culture areas of Hiroshima Bay, a triangular gulf in the western Inland Sea, with Kure, Hiroshima and Miyajima at its points. Raft culture only is employed, the oysters being grown on wires suspended from bamboo rafts, and thus never touch the sea bottom. This method keeps the oyster clean of mud, free from drills, and in a continuously moving current of water, which produces rapid growth. The growing areas have the same high standards as those where oysters are grown in the United States.

Hiroshima oysters are of the same



Single-Oyster Plastic Packages in three of the seven sizes currently being used by Nichiro Gyogyo K.K. for freezing individually frozen oysters. Net weight of contents in all of the packages is the same. A brand-labelled polyethylene top is heat sealed on the package before freezing, which is accomplished in 20 minutes.

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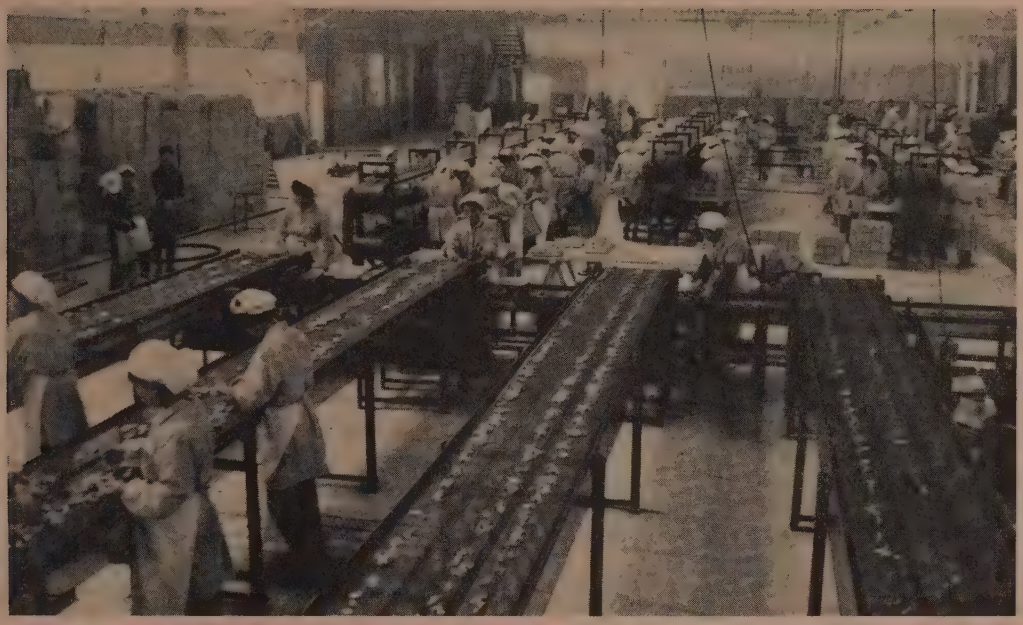


Canned Oyster Packing Room at Hiroshima, with the oysters in the foreground, mechanically size graded, delivered on belts after blanching. The women grade for quality, and the oyster meats pass to the lines in the background for hand filling into cans.

species (*Ostrea gigas*) familiar for many years in the United States, and particularly on the Pacific Coast, under the name Pacific oysters.

In the Hiroshima area *Ostrea gigas* develops distinctive local characteristics which have been esteemed by the Japanese for centuries. This Hiroshima type of oyster is known to have been cultivated in the Hiroshima prefecture since the 15th Century.

Oysters for the plant may come only from areas approved by the Hiroshima prefecture sanitary inspectors, working under the most exacting specifications, with regular inspections and analytical studies at stated intervals. Harvesting from a particular cultural area must be preceded by 30 days advance notice to permit a final check and microscopic coli-count procedure before the oysters are loaded aboard harvesting vessels for transport to the packing plant.

From the time they are removed from the water the oysters, although still in the shell, may be washed only with water which meets drinking-water standards.

● Nichiro's Hiroshima oyster plant is located on the city's Inland Sea front, on dredged ground protected by a rock seawall. Construction is entirely of reinforced concrete, aluminum, glass and tile.

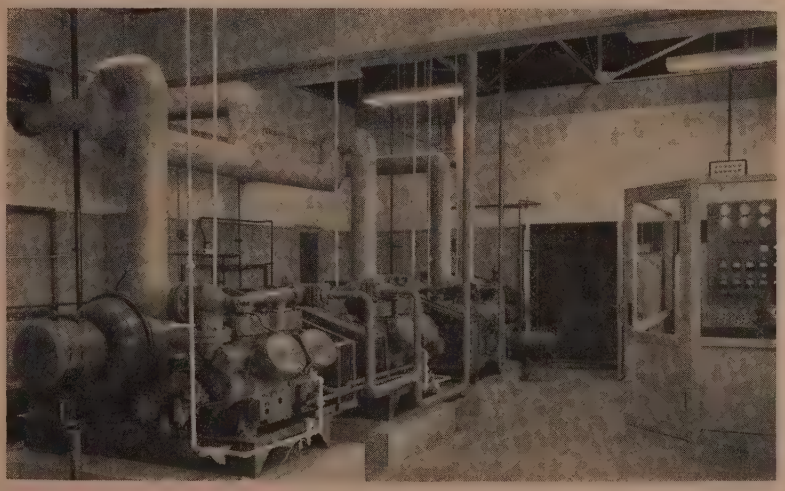
The plant is built in the form of a rectangle with one open side, that toward the water. Each of the three sides of the structure is devoted basically to one of the three functional elements of the operation: oyster supply; freezing and cold storage; canning.

The oyster division is devoted altogether to oysters, and will have no other function. The cannery, on the other hand, will can Japanese oranges and other products in season.

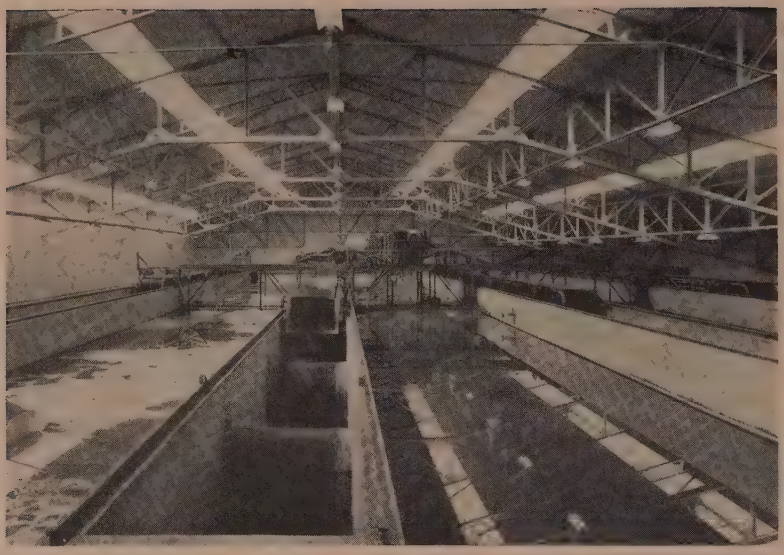
All frozen oysters packed in the plant will be for export; and all will be individually frozen in polyethylene sheet formed with pockets and with a labeled cover heat-sealed before freezing.

Canned oysters are of the traditional standard pack, but produced to standards much higher than those of most imported canned oysters appearing on the United States market. In particular, they will be fresh-opened and blanched according to the method which has become standard in oyster canning on the Pacific Coast of the United States.

● Despite the novelty of the frozen product, with each oyster in its individual plastic recess, no feature of Nichiro's Hiroshima plant is more noteworthy than the oyster receiving, handling and opening division and the



Modern, compact refrigeration system of the Nichiro oyster plant is entirely controlled in the room at the right. Beside the three Carrier compressors seen here, the plant has two other similar units.



Oyster Distribution is handled here. Washed oysters and flake ice enter at the far end of the building on the belt seen in the center, and are then carried transversely to the parallel belts serving the four oyster bunkers, of which one is seen in the foreground.

methods by which it operates.

The boats on which the oysters are transported to the cannery must meet sanitary specifications, and are subject to inspection.

Oysters are unloaded at the plant dock direct from the boat to a belt conveyor, where they are washed by high pressure sprays of fresh water as they move into the plant. Just before entering the building the shell oysters are given a final spray washing with water containing 100 parts per million of chlorine.

As the oysters enter the building they pass on an horizontal conveyor under the flake ice machine, where flake ice covers the oysters on the belt, later to be mingled with them in the bins of the opening house. (Boats also can be iced by reversing conveyors to deliver ice to dockside.)

Flake ice is manufactured by a 20-ton North Star machine using water meeting the highest drinking water standards of purity. The machine was manufactured by North Star Ice Equipment Co., Seattle.

Oysters and ice are distributed by longitudinal and transverse belts into four concrete storage bunkers, each 110′ long, 10′ and 3½′ wide. The four bunkers have combined capacity of 8,000 bushels of oysters. As each bunker is filled it is top-iced by running flake ice from the conveyors on the oysters.

Ice-and-oyster content of the bunkers is calculated promptly to bring temperature throughout the bunkers below 50° F., and to hold it there.

● Oysters feed down from the bunkers by gravity to the shucking surfaces with space for 420 openers. All oysters are fresh opened by hand in accord with modern practice. Steam opening, with its tendency to shrink and toughen the oysters, is not employed.

Floor of the opening room is of terrazzo. Walls and bunkers are all of concrete. Only stainless steel tools and utensils are employed. Oysters are shucked into colanders of this material, and then are washed in air-pressure type stainless steel washers, *the water employed being pre-cooled to* 34° *F.*, thus effecting immediate reduction in temperature of the shucked oysters to barely above freezing.

From the washers the chilled oysters are discharged onto perforated stainless steel grading tables from which expert workmen grade them into a number of categories according to size and condition.

At this point the oysters are routed to the freezing or canning departments, as may be dictated by orders or specifications.

● Nichiro oysters are frozen in seven different size categories at present, with it probable that other counts will be added in future. The polyethylene packages all have the same net weight of oysters—5¼ oz., but the count per package will range from 10 to 24 oysters. All individual oysters in a single package are of the same weight.

Oysters are placed in the plastic recesses by hand, filling the compartment fully. The cover is a polyethylene sheet, heat-sealed before the package goes into the freezer.

Six of the packages are placed on a metal tray which goes into a wheeled metal rack. Each such rack or cart holds 70 gals. of oysters, and four racks go into a freezing tunnel at a time.

Freezing is accomplished in 20 minutes at —30° F.

Tunnel freezing capacity of the plant is 10 tons of shucked oysters in 8 hours.

The plastic packages fit four into a *Willapoint* branded carton, this being done in a room where the temperature is held at freezing at all times. Twelves of the four-package cartons go into a corrugated master case.

Oyster Opening is done here, and also on both sides of two other bunkers similar to those shown. Note all-concrete construction, terrazo floor and admirable lighting. The plant has stations for 420 openers.

Storage temperature is —7° F. Capacity of the present cold storage is 800 tons.

● The oyster opening and packing rooms in the Nichiro plant are all air-conditioned. The blast freezing tunnels and the cold storage holding rooms all have air curtains to maintain even interior temperature even when doors are open.

Each utensil used in contact with shucked oysters is washed, rinsed and heat sterilized before it is returned to the workers.

● Refrigeration for the plant is supplied by five Carrier compressors in a system engineered by Western Engineers, Inc., Seattle and Portland.

Two of the multi-cylinder compressors, driven by 75-hp. motors, handle the freezing tunnels. Another, with 50-hp., maintains refrigeration in the cold storage. Water cooling for the chilling of shucked oysters and other purposes requires one compressor with a 50-hp. motor and a unit of similar capacity serves the flake ice machine.

● Cannery operation follows the advanced blanch method developed on the Pacific Coast of the United States.

Chilled, shucked and graded oysters are passed through a blanching unit using a hot water bath, from which they are delivered by conveyor belt to a mechanical grader which separates the oysters into four size groups. Of these, the large and medium sizes are routed to standard canning, while small and extra small sizes are diverted to smoked oyster packing.

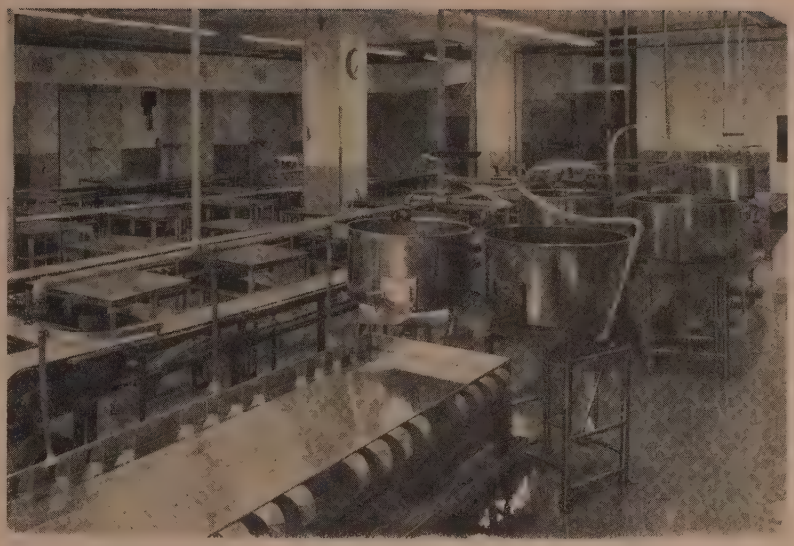
Standard canned oysters are filled in the cans by hand. Hot brine is added and the cans are sealed and processed.

Oysters of smoking size, already blanched, are shrunk further in steam; then smoked in a kiln outside the main plant building, returning into it for packing and processing.

● The plastic package of individually frozen oysters was market-tested in the United States before being adopted for the Nichiro enterprise.

Character of the package and the unique nature of the product, with all oysters uniform in size and shape, individually frozen and protected, obviously will put the item in the upper class group of frozen delicacies. It is expected to find itself in the refrigerated cabinet company of frozen shrimp, scallops, lobster tails and such specialties.

American super-market selling price per package is expected to approximate 39 to 40¢.



Plastic Package Filling is handled here, after the oysters have been washed by air agitation in the washers and size graded on tables as that in the foreground. Polyethylene packages are filled at the tables and then move to the right on three belts. Plastic covers are applied and heat sealed at the far right background, and finally frozen in the tunnels whose doors are seen in the upper left background.

Market studies by Coast Oyster Co. lead the company to believe that there is an excellent market for this type of packaged oysters, not only in the United States but also in other parts of the world. The amount of this product to be produced will be small when compared to the ever decreasing supply of fresh oysters available to the people of the world.

The single fresh frozen oysters will be distributed in the United States and Canada by the Rupert Fish Co. The canned and smoked oysters will be distributed under the *Willapoint* label by Van Camp Sea Food Co.

Japan's Third-Phase Operation Employs 6 Ships, 40+ Trawlers

● Third phase of Japan's exploitation of the bottom fish and shellfish resources of Bering Sea entered its period of activity in August when six fleets put out to take 30,000 tons of fish for freezing. The other two phases are the King crab and the fish meal manufacturing fleets.

Three of the fleet units will fish in the Bering Sea and three in the Sea of Okhotsk.

Freezerships, trawlers serving them, and their targets in metric tons are as follows:

Miyajima Maru, 5 trawlers, 4,500 tons; *Kashima Maru,* 10 trawlers, 5,000 tons; *Otsu Maru,* 10-12 trawlers, 7,000 tons; *Chiyo Maru,* 8 trawlers, 5,000 tons; *Eijin Maru,* 8 trawlers, 5,000 tons.

Uneasiness is reported in some sources in Japan lest these vessels may find it difficult to fill their quotas, as they will be fishing areas from which the fish reduction expeditions already this year have taken 300,000 tons of fish, producing 50,000 tons of fish meal.

Because of this fact, three of the freezer fleets will work the Okhotsk this year. Which of the six will be on station there has not been made known.

Nichiro Plant Construction Wins Warm Commendation

Verne Hayes, president of Coast Oyster Co., South Bend, Wash., is high in his praise of the Nichiro Gyogyo K.K. oyster plant at Hiroshima, which he unhesitatingly characterizes as "the world's finest oyster plant."

He also expresses warm appreciation of the fine cooperation of Tokai Kyogyo K.K., a contracting company of Tokyo, in designing and constructing the plant. He cites further the energy and enthusiasm of the staff of Nichiro Gyogyo, whose members devoted many handreds of hours to the project beyond their regular working days; and through *Pacific Fisherman* expresses to all of them his personal thanks for their dedicated service.

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PACIFIC FISHERMAN'S NEWS
SEPTEMBER 1960

Calif. Albacore Prices Sag Under Weight of Deliveries

● Albacore fishing in Southern California waters was little short of phenomenal as the season progressed toward its summer-end climax late in August.

The U. S. Bureau of Commercial Fisheries Market News Service reported that the total California catch through August 13 — 6303 tons — is 5% over last year for the same period —this in spite of the fleet tie-up from July 9 to 21.

The weather was rough a good deal of the time, and some boats were kept in port on that account. Despite this, the San Pedro and San Diego Albacore fleets combined delivered 1890 tons to the canners the second week of August, as compared with 1517 tons for the same week last year.

● Prices generally took two dips during the month. From the $375 offered late in July when the fleet resumed fishing, the price dropped to around $325 on Aug. 1, and again to around $300 a week or so later.

At these prices, most canners were taking as much fish as the boats could deliver. On the fishermen's part there was considerable dissatisfaction with the drop in prices, some vessel owners complaining privately that, considering the short duration of the season, the going prices were below what it cost them to operate their craft.

The canners countered that Albacore is a world commodity and world supplies and prices were such that they could not pay more than around $300 per ton and still compete with their canned product in the supermarkets.

Coast Group Gains

● One result of the tie-up that ended late in July was the strengthening of the Albacore fishermen's coast-wide organization in the Fishermen's Co-Operative Association, with headquarters in Seattle.

To strengthen their marketing and bargaining position, the Albacore men formed strong units of their organization in San Pedro and San Diego. The Association established offices on Terminal Island, and appointed Carl S. Kegley, an attorney from Riverside, Calif., as its manager there.

The policy-making group of the San Pedro branch of the association is a 12-member board of directors, of which Harry Lund of the fishing vessel *Ajax* is chairman.

According to Mr. Kegley, members are contributing to a Production and Development Fund, which will be used, he said, to improve methods of production of Albacore, and promote the product in the market.

● Side by side with the Southern chapter of the FCA, the established California Fishermen's Association, a fishermen's buying co-operative managed by Pete Repovich, continues to function on Terminal Island.

Most of its members, Mr. Repovich said, have joined the FCA but continue to belong to the CFA, which continues to serve them as a buying co-operative for fuel, ice and supplies.

In San Diego, Five-Star Fish & Cold Storage Inc., which provided a similar service to Albacore men in the Southern city, was undergoing liquidation of its supply store. Vernon Trevellyan, an Albacore vessel owner himself, and an experienced businessman, was appointed trustee and the stock of supplies in the store was being sold off over the counter.

What Can Be Done About HALIBUT PRICES????

● Small up-swing noted in halibut prices in August did not divert the attention of some thoughtful students of halibut economics from serious consideration of just what ails halibut prices; and what might be done to raise them.

An example of early consideration of the problem was action taken by the U. S. Bureau of Commercial Fisheries Aug. 22, when S. J. Hutchinson, regional director, convened a meeting in the regional offices between a number of men acquainted with the problem and the BCF regional planning team.

This was a definite preliminary approach.

Other, more personal, discussions have been held; and undoubtedly

Aluminum Gillnetters Do Well in Alaska

The aluminum gillnetters built by Marine Construction and Design Co., Seattle, are reported to have performed well during the 1960 season in Alaska.

Two of these gillnetters fished on Bristol Bay. One fished by Frank Voyvovich, Naknek, during the big run had 4,700 fish aboard with room for 500 more in the fish hold and still no fish in the stern compartment. Voyvovich, a long time Bristol Bay fisherman, found the new craft to perform well under difficult conditions and to have unusual carrying capacity.

On Cook Inlet, Les Clark, fishing the Kenai Packers' *Porpoise* for the second season, was high boat for Kenai Packers and one of the top fishermen in the Cook Inlet area. He reports that the two factors which made his aluminum gillnetter a high boat were its speed and sea-keeping qualities.

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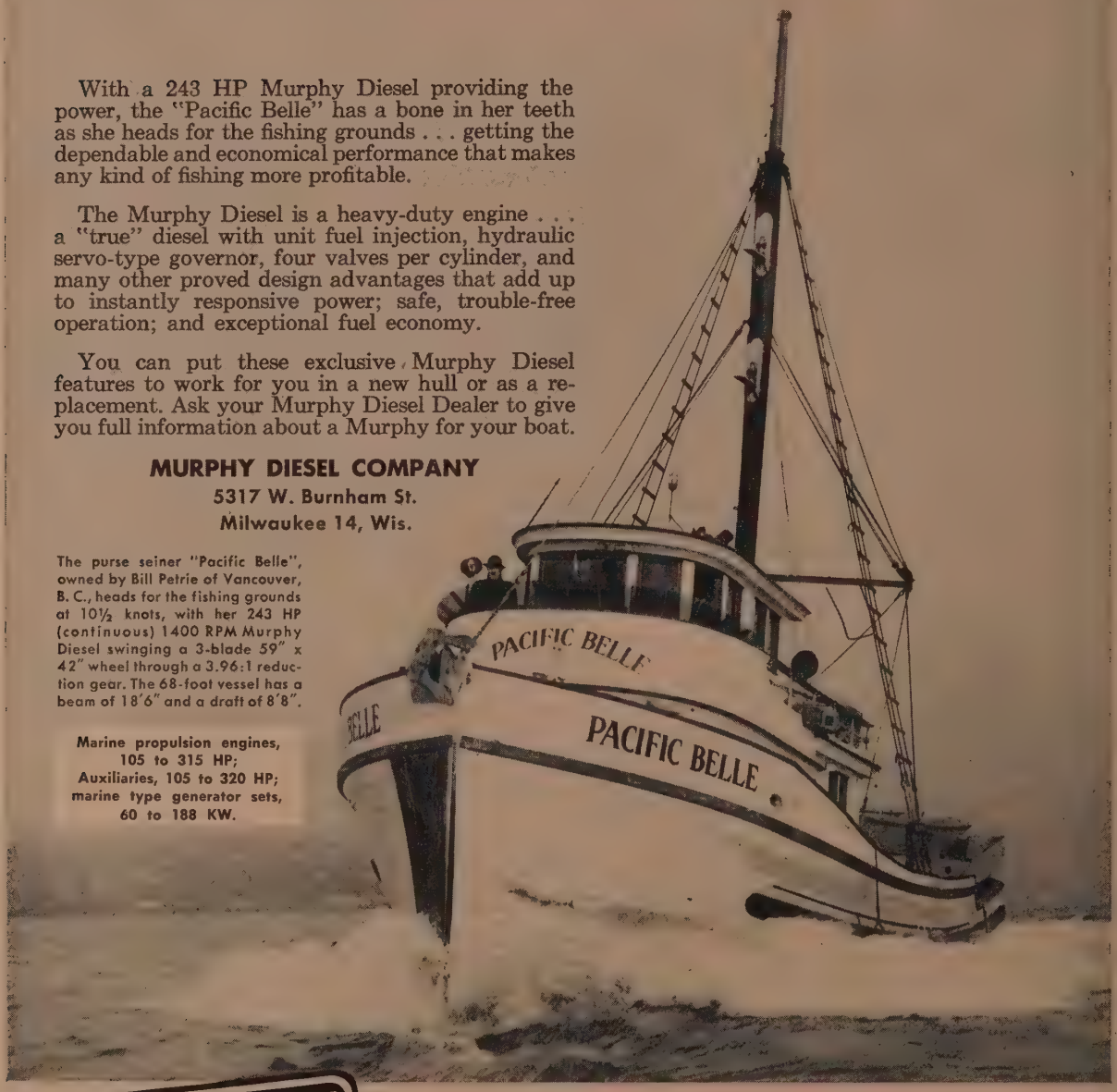
The purse seiner "Pacific Belle", owned by Bill Petrie of Vancouver, B. C., heads for the fishing grounds at 10½ knots, with her 243 HP (continuous) 1400 RPM Murphy Diesel swinging a 3-blade 59" x 42" wheel through a 3.96:1 reduction gear. The 68-foot vessel has a beam of 18'6" and a draft of 8'8".

Marine propulsion engines, 105 to 315 HP; Auxiliaries, 105 to 320 HP; marine type generator sets, 60 to 188 KW.



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halibut vessel owners and fishermen have done a bit of thinking during the season.

There's a prospect that the problem of halibut prices, which in the past two seasons has become a very real one for the producers, will come in for some searching scrutiny during the closed season.

There'll be meetings and ideas and arguments — and maybe they'll have some results.

● The preliminary meeting with the BCF planning study team was part of a Bureau undertaking to evaluate its activities and to seek the means by which its service can be most productive to the industry.

At the meeting, beside Mr. Hutchinson, were John Dassau, Clinton E. Atkinson, and D. L. Alverson, members of the planning team; Walter Johnson and Palmer Olson, dealers; H. E. Lokken, manager of the Fishing Vessel Owners Association; Harry Dunlop, director, International Pacific Halibut Commission; DeWitt Gilbert, editor of *Pacific Fisherman*. The Deep Sea Fishermen's Union could not be represented, but Clarence Nordahl's views on some points were presented.

● Apart from the discussions at the meeting, which will probably be reflected in the planning team's report, some of the proposals which have been heard in recent weeks as possible solutions to the depressed condition of the halibut market include:

1. An independent economic research study financed by the producers to inquire into the present halibut marketing system in an effort to determine whether it is the best method under today's pattern of distribution.

2. Study of the possibility of reducing the cost of producing halibut by the employment of possibly more efficient methods of fishing than longlining.

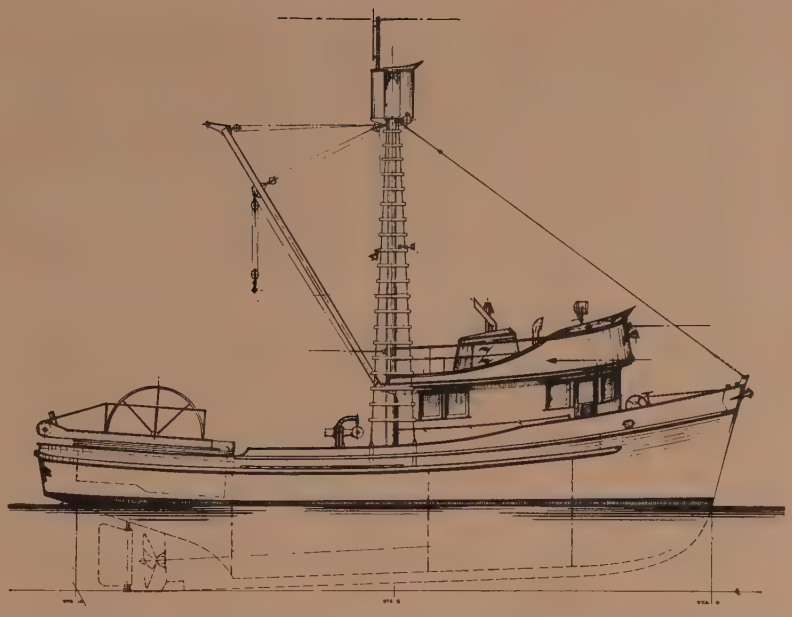
3. Up-grading halibut quality in the hope that someone would pay more money for it.

4. Halibut market promotion on a continuing basis through a fund raised by voluntary and matching contributions on a poundage basis by the producers and dealers alike.

● These are some of the ideas which have been advanced.

The next few months doubtless will produce others, and perhaps far better ones.

Out of the need and the scrutiny something sound may come before the next halibut season opens.



A New Drum Seiner for Puget Sound

● Salmon seine boat building for 1961 cycle year of the Quesnel and Stuart runs to the Fraser, is getting under way early this fall, with Peter Zuanich of Bellingham already authorizing Bellingham Shipyards Co. to build him an Alaska limit drum seiner from designs by Philip F. Spaulding and Associates, Seattle naval architects.

The Zuanich craft, whose outboard profile is pictured here, is 58' 3" overall—unusual length for an Alaska limiter—and 49' 10½" registered length.

Fishing equipment is an advanced type of drum seine as developed in Bellingham, American center of that specialized form of fishing. The installation can be readily removed for conversion to other forms of fishing, should that be desirable.

The vessel has accommodations for master and crew of six.

Diesel for the vessel will be approximately 240 hp.

"Shirley Lee" Sold

Percy L. Musser, Crescent City, Calif., has purchased the well known troller *Shirley Lee*, formerly owned by Newton Franklin, Eureka.

Late August Albacore Show-up Off Oregon

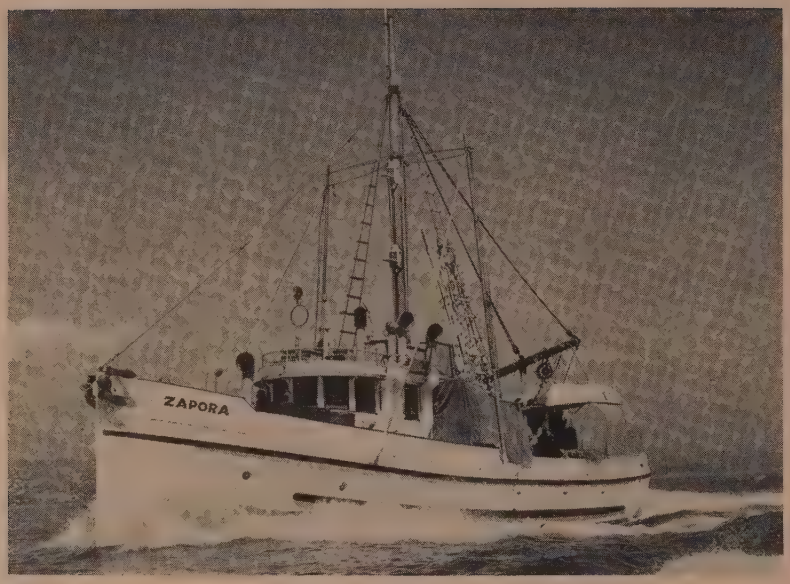
Deadline for this issue of *Pacific Fisherman* found Albacore fishermen reporting good fishing in 62° water off Cascade Head on the Central Oregon coast.

At the same time there had been a marked fall-off in Southern California fishing, and some of the northern vessels were seeking to find the fish en route north.

Despite a few flurries, Albacore deliveries at Oregon and Washington ports through August were definitely disappointing and far short of expectations.

More Tuna Vessels Building for Japan

July 19 authorization of new vessel construction in Japan cover 28 fishing vessels, including eight tuna craft, two of 99 tons, and the others ranging from 279 tons to 387 tons.



Powered with a Compact Cat, the veteran **Zapora** of Vancouver, B. C., is the first Canadian fisherman to install the new D333 Caterpillar diesel, developing 185 bhp. at 2,000 rpm., cut to 590 through a 3.36:1 reduction. Peter Iverson and Harry Lansall, owners, particularly like the D333's power with compactness, which enabled them to increase **Zapora's** fish carrying capacity.

Martinac Building Giant Tuna Seiner of Tomorrow

● First tuna seiner to be *built* for that rich phase of fishing since tuna seining turned the corner of prosperity was laid down in August by the J. M. Martinac Shipbuilding Corporation, Tacoma.

The vessel, which was designed by J. M. Martinac specifically for purse seine service, and specifically for tuna seining, is being built of wood; and will be 142′ in length.

She comes from a yard famous for its seiners and clippers and naval craft; and which has made a large contribution to winning for Tacoma its title of The Cradle of Purse Seiners.

Ownership of the vessel will rest with the Martinac Corporation, of which J. M. Martinac and his son, J. S. Martinac, are principals; and with Lou Brito of California, who is expected to be her skipper as well as part owner. Already he has had three tuna fishing vessels of Martinac construction: first the *Southland,* followed by the *South Pacific,* and then the *Southern Pacific,* which is believed to have been the first bona fide clipper to have been converted to tuna seining; and which is regarded as one of the high-liners of today's high-lining fleet.

● The new Martinac seiner is expected to have carrying capacity for 400 tons of tuna.

She will be powered with a Fairbanks-Morse opposed-piston diesel, developing 1,600 hp.

Her refrigeration system will be designed specially to cope with the specially severe demands which seining, with its frequently heavy catches, makes on refrigeration.

J. S. Martinac says that decision on the technical details of the refrigeration system have not yet been decided upon; but that of a certainty the refrigerating capacity of the equipment will be exceptionally high.

Completion is expected in the late spring of 1961.

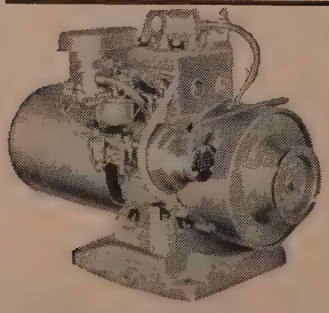
Nelson Bros. Inaugurate Basin for Gillnetters

Nelson Bros. Fisheries, Ltd., one of the major British Columbia operators in the fishing industry, formally opened a new basin for gillnetters adjacent to its plant at Steveston at the mouth of the Fraser river in August.

The new facility provides sheltered accommodation for about 200 vessels, according to W. C. Nelson, manager of the Steveston plant, under whose direction the project was carried out by Centennial Dredging & Sand Co. The job occupied about four months.

The new basin offers an effective solution to the problem of shortage of tieup space in the area.

Richard Nelson, president of the company and other executives, including municipal officials, attended the opening ceremony.



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Shipnotes: 150 horsepower Murphy diesel powers the M.V. Noyo Star. Engine required only one overhaul in last fifteen years. Top speed is nine knots—fishes for sole, rock and ling cod. Navigation and fishing aids include a Fathometer, radio and Loran.

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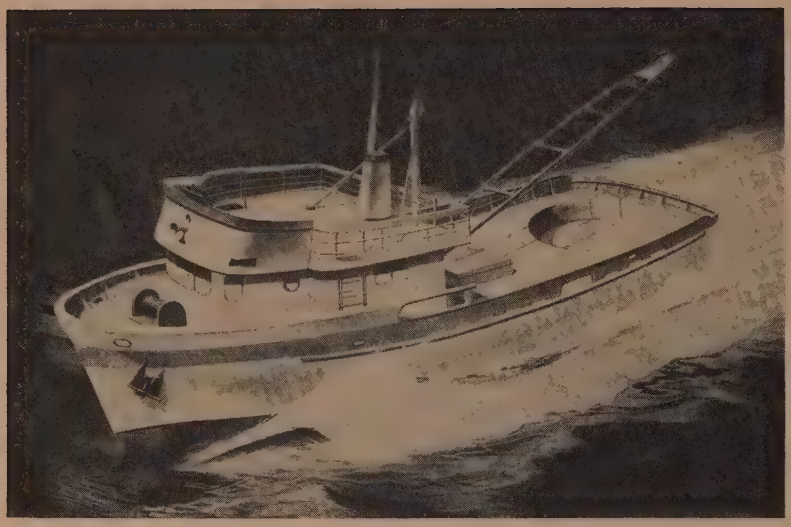

Aluminum, Power and Planing Give Seiner Sensational Speed

● Aluminum construction, a powerful lightweight engine, and a planing hull are being combined to produce a purse seiner whose cruising speed, fully loaded for fishing, is designed to double that of the conventional fishing vessel in this trade.

The revolutionary seiner is being built by the Alfab Company, Seattle, for its owners, John Dontos and S. A. Johnson, men with long personal experience in purse seining. They feel that the ability to get on the grounds quickly, and to move between Puget Sound and Alaska at a saving of 50% of normal running time, is vital to successful seine fishing in the future.

With this conviction, and ideas as to how it should be done, Mr. Dontos and Mr. Johnson called upon Phil Brinck and Associates, Seattle naval architects, to design the craft. Reynolds Metals Co., which is supplying the aluminum, also furnished much technical assistance on various points of design and method.

It is expected that the vessel, 57′ overall by 18′6″ beam and 8′ depth, will be able to attain 24 knots empty, and will have normal speed of 16 knots fully equipped for fishing and carrying her skiff.

● First element in meeting this speed target lies in the material. The all-welded hull of ¼″ aluminum, with 3/16″ for bulkheads and other high-stress parts, tubular aluminum mast, and other light metal applications permit reduction in the weight of the vessel by more than 23,000 lbs.

Power to perform at the unprecedented speed sought will be provided by a Cummins V-12 diesel rated at 700 hp.

With this kind of power in a 50,000-lb. boat, Brinck and Associates designed a hull of planing type which can rise to utilize the power.

● A number of features appear in the vessel, beside her lightness, power and form.

She will have no mast in the conventional sense. Boom is of stayed girder construction, supported from a short tripod, with the topping lines carried down through the hollow main member of the tripod. There will be no turntable, but a tub is provided on the after deck for safe stowage of the nylon net. The boat will be wired for both 110 and 220 volts.

Weight is saved through a shipbuilding principle called "Snap-Lock," devised by the Reynolds product development division. This allows superstructures to be made by snapping a series of aluminum extrusions into each other so tightly that it is unnecessary to weld or rivet the joints.

Skiff naturally will be of aluminum, 17′ long.

Cost of the vessel complete will approximate $100,000. Premium of aluminum construction is in the neighborhood of 15%, but her owners believe this will be recovered in a short time through additional fishing days gained by her great speed; but reduced maintenance and longer life.

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Weakness of Bering Sea Program Confessed Before U.S. Advisers

● American Fisheries Advisory Committee to the Secretary of the Interior is the official name of a group of representatives of the commercial fisheries created by the Saltonstall-Kennedy Act to advise the Secretary with respect to expenditures of the funds made available under that legislation.

The committee met in Seattle in August, Basically, its sessions are private. Broadly, its functions are advisory. It listens to proposals for S-K projects and expresses opinions about them.

The Secretary of the Interior decides, on the basis of recommendations from the Bureau of Commercial Fisheries, where the money is to be spent, how, when, and how much.

● At the open session of the committee in Seattle Aug. 10 it received a broad hint of U. S. B. C. F. concern over the weakness of the United States' fisheries position in Bering Sea, the inadequacy of American knowledge of the fisheries possibilities off the Bering Sea coast of Alaska, and the limited character of the explorations which the United States has been able to make in that sea.

U.S.S.R. and Japan exploit on a large scale the fish and shellfish resources of the Bering, but thus far American private enterprise has not known enough of the area to justify risking its development. Federal investigations have been limited and sporadic, although some have proven quite productive.

These points were developed in a careful way before the committee by Samuel J. Hutchinson, BCF regional director at Seattle. He touched on these matters by photograph and implication; but he did say rather plainly that the exploitation of the Bering Sea bottom by Asian vessels might prove destructive to the conservation edifice which Canada and the United States have reared since 1924 for the protection and rebuilding of the world's richest halibut resource in the shallow seas off the coast of North America.

To Study Radiation Pasteurizing

● Research into the possibilities of prolonging the refrigerated freshness of fish and sea food by radiation pasteurization is to be undertaken shortly at the University of Washington Fisheries Center under joint sponsorship of the Atomic Energy Commission and the Bureau of Commercial Fisheries.

This was announced to the American Fisheries Advisory Committee by Mr. Hutchinson, BCF regional director.

Ross Leffler Presides

● Ross Leffler, Assistant Secretary of the Interior, ex-officio chairman of the committee, presided at the Seattle meetings. Accompanying him were Donald L. McKernan, director of the Bureau of Commercial Fisheries, and numbers of the Bureau's staff from

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Washington and the Pacific Northwest Regional offices and stations.

The Pacific Coast at present has five members of the American Fisheries Advisory Committee, three of them from California, Donald P. Loker, A. H. Mendonca, and Harold Cary; Lawrence C. Calvert of Washington and Chris Dahl of Alaska.

Although there are two vacancies on the committee, neither Oregon nor Hawaii are represented; and Alaska, with its enormous coastline, its tremendous fisheries resources, and acute problems growing out of the increasing exploitation of the seas off its coast by fleets of other nations, has but a single voice.

Full committee membership, by states is:

Virginia—(2): William P. Ballard, H. R. Humphreys Jr.

Florida—(2): Leon S. Kenney, Harry F. Sahlmann.

Louisiana—(2): J. W. Lewis, L. W. Strasburger.

Missouri—Ralph E. Carr.

Ohio—Ray H. Full.

New Jersey—David H. Hart.

Alabama—James McPhillips.

Connecticut—J. Richards Nelson.

Maine—Moses B. Pike.

Minnesota—Arthur S. Sivertson.

What You Have to Do to Qualify For Boat Construction Subsidy

● Qualification procedure for securing Federal government subsidy under the law permitting payment of the difference between cost of construction in the United States and a foreign country is spelled out in a recent declaration of the Department of the Interior.

Where the subsidy is sought under the provision of the law providing assistance in industries injured or threatened with injury by imports, the regulations require:

That in case an industry has not already been found to be injured or threatened, applicants for subsidy must present evidence of injury or threatened injury. A finding of whether or not such injury exists or threatens will be made by the Secretary of the Interior.

This determination will be made, without excluding other factors, on a basis of "downward trend of production, employment, prices, profits or wages in the domestic fishery concerned, or a decline in sales, an increase in imports, either actual or relative, a higher or growing inventory, or a decline in the proportion of the domestic market supplied by the domestic fishery concerned."

● Where the application is made under the provision of the law providing subsidy in cases where vessels "aid in the development of domestic fisheries," under conditions "in the public interest," "the vessel must be, a modern vessel which will tend to upgrade the fleet and, unless of completely new and advanced design, shall not operate in a fishery which the Secretary deems to have sufficient vessels economically to harvest either the maximum sustained yield of the fishery or the maximum amount which can be marketed in an orderly manner."

Peter Sellen Dies

Peter P. Sellen, who made salmon egg fish bait packing a sound business and gave it stature, died in Seattle late in August at the age of 81.

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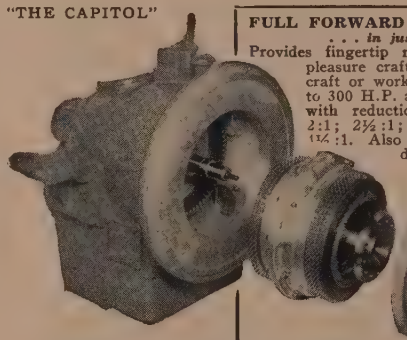

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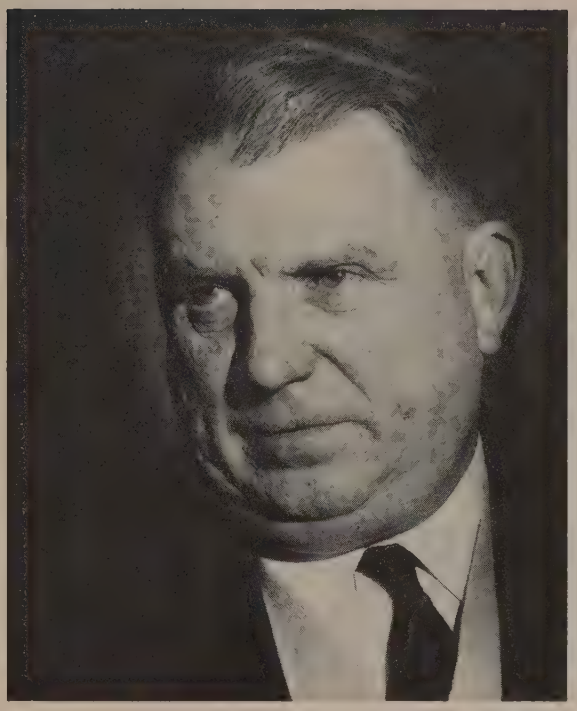

● Joe Whitmore retired as Pacific area director, Canadian Fisheries Department, August 12 at the peak of his career—after seeing at closest possible range an industry's turbulent economic and technological revolution.

He also witnessed the complete transformation of his own organization in Vancouver, from an inadequate wartime setup starved for funds and personnel to what it is today—a fully-staffed, efficient operation, the largest of its kind in Canada.

During all this time, Joe Whitmore was the man-in-the-middle in scores of conflicts between fishermen, operators, conservation and other agencies. He and his associates made countless decisions every year affecting the revenues of companies and individuals. The pressure on him was always there, especially in recent years; and eventually the doctors persuaded him to quit while he was still ahead.

Joe quit when he was a long, long way ahead, because his reputation as a top-level administrator was secure, and he had stayed on the job long enough to see so many of the projects dear to his heart accomplished.

● Joe Whitmore had the kind of job most people said defied popularity. How could anyone make and hold friends when he had the authority, frequently used, to slash their earnings with the stroke of a pen? Yet one of the minor miracles of his career was that he did make and still retains staunch friends and supporters among the diverse and almost constantly warring factions that comprise B.C.'s $100,000,000 fishing industry.

How did he do it? A man who has been close to the industry for many years offered the answer: "You always knew that Joe was fair and that when he made a decision it would stick."

Although officially retired as area director, A. J. Whitmore continues as a member of the International Pacific Salmon Fisheries Commission, which he has served for 21 years.

● A few days before leaving his desk in the big new departmental headquarters in Vancouver, Mr. Whitmore looked back over the years and told Pacific Fisherman about the things that have impressed him most during a 43-year career.

"A lot of happenings during my years as director have given me tremendous satisfaction," he said, and he named the Skeena management committee which he has headed with Dr. A. W. H. Needler and which is restoring the Sockeye on that important northern river; the success of the Salmon and Halibut Commissions, and the Fisheries Development Council, a unique group organized four years ago and which Mr. Whitmore has headed from the beginning—dedicated to co-ordination of information on B.C.'s fisheries resources and making the public aware of their actual and potential value. The FDC represents not only the principal government agencies concerned, but the fishermen, the operators, vessel owners, University of B. C., etc.

"Most of the more successful projects were the result of adversity," Mr. Whitmore continued, "and that's one of the things you realize after you've been in fisheries as long as I have. We wouldn't have started the FDC if we hadn't been worried by the threat of power dams on the Fraser. We wouldn't have started the Skeena management committee if the Sockeye runs there hadn't been almost ruined by the Babine slide. And, of course, the Fraser salmon and the halibut treaties didn't come about until both Canada and the U.S. were convinced that those fisheries faced depletion."

The most difficult problem facing B. C. fisheries today? Up near the top of Mr. Whitmore's list is the fact that more people with better boats and gear are trying to make a living from a resource that hasn't had a chance to keep pace with fishing skills and facilities.

● Alfred Joseph Whitmore was born in New Westminster in 1901 when the salmon industry dominated the area and the first warnings of overfishing were being sounded. Although he coveted a job as waterboy in a shipyard because it paid $87 a month, he settled for employment in the fisheries department at New Westminster for $300 a year, but he never regretted his choice. In 1922, when the office was moved to Vancouver he went there as senior clerk-stenographer, and he remained there until his appointment to Ottawa as head of the western division in 1929. He returned to the coast as supervisor in 1947. He was married in 1930, has five children, two sons and three daughters.

● As Joe Whitmore retires, men who know best say of him:

"No more capable, conscientious, honest and effective fishery administrator ever served his country."

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AMPAC at Half-Tide as seen from the office windows on the bank above. Hull with the two cranes at the left is an auxiliary supply and storage barge. Floating cannery itself is largely obscured below the dock. Note retorts ashore and the cars of cooked salmon being cooled along the dock and roadway.

American Packing Co., Afloat and Ashore

● Operations of the American Packing Co. on the Naknek River in the Bristol Bay area of Alaska attracted special attention this season because of their distinct and daring character.

Begun in a preliminary way in 1959, the operations entered into a stepped-up second phase during the past season, with final development billed for 1961.

John J. Theodore and Karl V. Sjoblom, principals, are developing their Bristol Bay operations around the concept of a floating cannery tied to a shore installation. The steel cannery barge *Ampac* was described in some detail in *Pacific Fisherman* for March, 1960. She is 122′ long with 35′ beam.

● A staggering task faced the Ampac organization in preparing for the 1960 season. A T-shaped pier was built, with the head on the channel for mooring the cannery, and a broad stem running ashore, the retorts placed on it this season. Next year it is planned to install them on an upper deck to be built on *Ampac*.

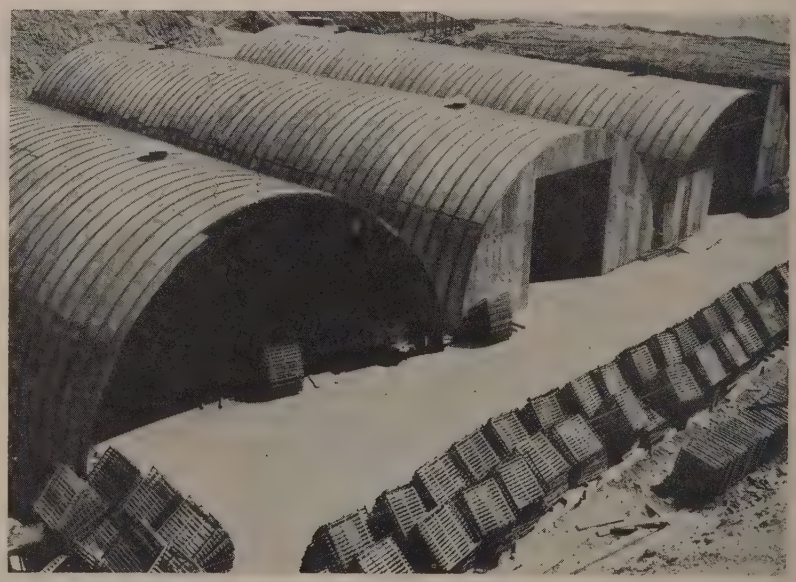
Biggest job of all was excavating 30,000 cubic yards of material out of the high river bank to provide a safe location for three Quonset-type warehouses. The ground area, paved with concrete, is an *average* of 20′ below original ground level over an area 200′ square. Of this excavation, 7′ was through permafrost, the Arctic curse of the excavator.

A paved roadway running diagonally up the face of the river bank connects the cannery and pier with the warehouse area. The cannery camp, offices, garage and messhall are located on the high bank immediately overlooking the operations.

● Ampac is equipped with a Model K Iron Chink handling 130 fish per minute; two high speed Continental Can Co. half-pound lines and reformers; a North Star ice machine located above the upper deck.

On the pier are three 7-car Reid retorts; and the casing warehouse is equipped with a Standard-Knapp caser and sealer line. Retort cars are spotted along both sides of the roadway from dock to warehouse for cooling.

Operating staff at Ampac, beside Mr. Sjoblom, included: L. E. Bowman, manager; Doug Sheriff, superintendent; James Doran, night superintendent; Lawrence Freeburn, fish superintendent.



Entrenched Warehouses of the American Packing Co. seen from the edge of the excavated area which was dug for them. The area, approximating 200 by 200′, is paved with concrete. Cans are cased in the Quonset at the left and the finished park stored in the other two. Ampac is unusual among Bristol Bay operations in that it packs exclusively in halves.

Bellingham's Cold Storage's new facilities stand-out here in the foreground. The new Freezer Building is at the right corner of the Squalicum Industrial Block, at the entrance to the boat haven. The new Cold Storage Building immediately to the left of the Freezer. Ice Storage and Delivery facilities are in the building between and just behind the two major units. To the left are some of the structures of the Bellingham Shipyards Co., another Talbot enterprise. The long, light-colored building with two stacks is the cannery of the Columbia River Packers Association. Fishing vessel mooring facilities in the left background are largely vacant, as the boats were fishing during the Sockeye salmon run of 1960 when this photograph was taken.

Bellingham Makes a Strong Bid With Specialized Fish Freezer

● With the newest, and perhaps the largest, exclusive fish cold storage plant in the Pacific Northwest, this summer Bellingham, Wash., entered a strong bid in the competition for fish business, and did it through the Bellingham Cold Storage Co.

The new refrigeration plant is an extension, adjacent but independent, to the existing facilities on the property of the Port of Bellingham in the Squalicum industrial area.

Previously existing freezer and storage facilities are now devoted entirely to the freezing of vegetables and fruit, and the low temperature storage of these and other products, exclusive of sea foods.

The new buildings—and they are *all* new — are devoted exclusively to the handling of fish and sea foods. For this duty they were planned, specially designed and modernly equipped. Ice-making and storage are the only portions of the older establishment retained in the fish products division.

● Bellingham Cold Storage Co. is an enterprise of A. W. Talbot and his son James. Vice president and general manager is Martin Asplund, long identified intimately with the development and administration of this fisheries-serving facility. Einar Frolen, a veteran of fish freezing and cold storage business on Puget Sound, is the fish products foreman.

The company operates on a strictly custom basis. It does not buy, process or distribute products on its own account; but maintains an experienced and effective crew to handle a variety of services for its customers.

Present business of the Bellingham Cold Storage derives basically from these sources:

1. Storage of packaged frozen foods on account of Bellingham fillet houses, Bornstein Seafoods, Inc., and Dahl Fish Co., which operate their own plate freezers, but rely upon Bellingham Cold Storage Co. for their principal storage requirements.

2. Freezing and storage, packing and shipping, of whole fish, or of large institutional packages for local buyers and processors.

3. Receiving, storage, packing and shipment of frozen fish received in bulk from Alaska and held pending owner's orders.

4. Specialized processing on a custom basis of customers' property, a service which has been performed for 13 years for Wakefield's Deep Sea Trawlers, Inc., of whose Bellingham operations more detail later.

With the facilities provided by the 1960 addition to the Bellingham Cold Storage, Mr. Talbot and Mr. Asplund expect to expand particularly their business in this latter category.

Halibut in Storage at -15° F. in in new fish products plant of the Bellingham Cold Storage Co. Some of the world's largest halibut dealers have part of their purchases custom frozen and stored here.

● New fish freezing and storage facilities at Bellingham are located on the original fill at the Squalicum Boat Haven, an enclosed basin with fishing vessel mooring facilities and full protection of encircling breakwaters. The cold storage dock fronting on the boat haven, where ice delivery and fish hoists are located, has 21′ of water at mean low tide.

The west face of the property, fronting on the Squalicum Waterway, a Federal channel for which a 27′ minimum depth is projected, is ultimately to be furnished with new dock facilities capable of handling any coastwise steamers.

The property has direct spur connection with three transcontinental railways—Great Northern, Milwaukee and Northern Pacific; and of course is but a short distance from the Pacific Highway, U. S. 99.

● New cold storage facilities at Bellingham were installed by W. E. Stone & Co., Inc., refrigeration contractors, Seattle. The buildings were built by the Port of under long-term lease to the Bellingham Cold Storage Co., which provided the equipment.

Construction was of the tip-up slab type, with free-standing ceiling and complete Styrofoam insulation, 6″ in the walls, 5″ in the floor, and 7.5″ between the ceiling and the roof. With all-concrete construction and non-flammable insulation, insurance rates are the lowest possible.

The new storage building is 75′ by 355′ in dimensions, one story high, which makes possible the mechanical handling of all products without elevators. Refrigerated rooms have 17′ height in the clear. Normal storage temperature of -15°F. The frozen fish storage rooms have capacity for 8,000,000 lbs.

With the facilities built on a sea-level fill, ultimate subsurface freezing and building distortion is prevented by 4″ tiles embedded in the fill beneath the floor on 3′ centers, and vented through to open air on both sides of the building. In designing the building Hovind, Hawthorne & Smith provided two entirely independent concrete boxes, one inside the other, but with no structural connection; while an envelope of insulation completely surrounds the inner box, filling the space

Staff Conference at Bellingham: **James Talbot,** vice president, left; **Martin Asplund,** vice president and general manager, right; and **Einar Frolen,** fish products foreman, in the middle.

Manager and Freezer at Bellingham Cold Storage. Behind Martin Asplund, vice president and general manager of Bellingham Cold Storage Co., is an interesting feature of the new plant—the reception, freezing and glazing facilities in a specialized building separate from the cold storage.

between it and the outer structure. Ceiling and floor of the refrigerated rooms are supported on interior columns, independent of the outer walls.

Careful planning of the storage building provided ramps and adequate space for fork trucks to maneuver. The truck-loading dock is of sawtooth design, permitting five large semis to be handled at once.

● A distinctive feature of the plant groups the receiving, freezing and glazing operations in a separate building from the cold storage proper. This facilitates traffic movement and eliminates the handling of unfrozen fish in the storage structure.

The freezer building is situated in the corner of the property, with the basin and waterway docks on two sides. Insulation is 8" of Styrofoam. From the receiving, washing and preparation room the fish for freezing moves into four double-ended sharp freezers. The shelves are of metal plates on 45,000' of *square pipes* for maximum surface contact. Freezing is accomplished at -35°F. Daily freezing capacity of each room ranges from 25,000 to 40,000 lbs., varying with the size and type of fish. Increased plate contact through use of the square pipes effects a 25% reduction in the time required for freezing, increasing capacity by this same percentage.

After freezing, fish are withdrawn through the exit end of the sharp rooms to the glazing room; and then fork-trucked immediately across the narrow intervening roadway into the storage building.

Bellingham Cold Storage Co. uses an astonishing number of Wiretainers, collapsible baskets of heavily galvanized wire, for handling fish about the plant and in storage. These Wiretainers are manufactured by Pacific Wire Works Co., Seattle. Another type of combined pallet and frozen fish container coming into wide use is the Generalift Pallet Box, manufactured by General Box Co., Sheboygan, Wis. This box carries the frozen fish in a light but tight box with a pallet type bottom. The box is lined with heavy freezer paper and this is folded tight over the fish to prevent dehydration and glaze evaporation.

● King Crab operations of Wakefield's Deep Sea Trawlers, Inc., are a distinctive and significant aspect of the Bellingham Cold Storage operations, and have been so virtually from the beginnings of this largest of American frozen King Crab enterprises.

When the Wakefield company pioneered American King crab fishing and freezing immediately after World War II it built its operating system delivering the cooked frozen crab in refrigeration to Bellingham for further processing and packing. There the speciailzed work force of the cold storage company further processes, packages, packs, stores and ships the products on Wakefield account.

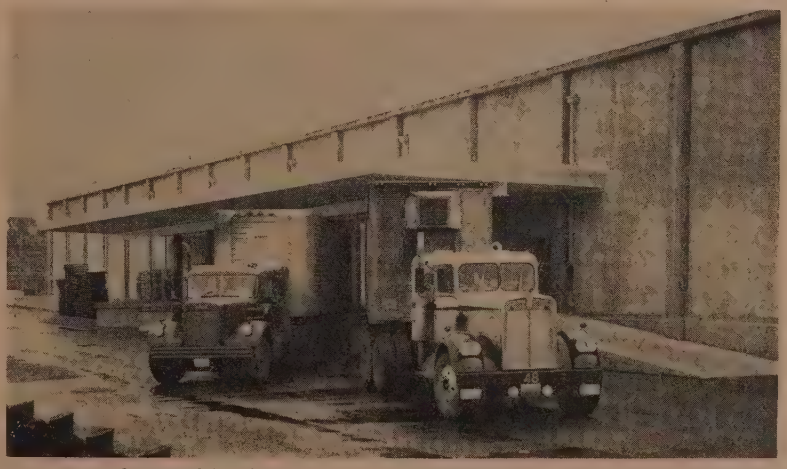
This is done for King crab arriving in any form, whether it be meat frozen in blocks or "sections" consisting of legs and claws frozen in the shell.

Thus the blocks of crab meat are sawn into exact-weight portions for packages of various sizes, glazed, packaged and packed in cartons.

Legs may be split on saws, which cut through the frozen shell. The split sections are then placed in polyethylene pouches and these in attractively lithographed consumer cartons.

The Wakefield product mix includes King crab packed in many forms, packages, styles and sizes—and all by the Bellingham Cold Storage crews. The work is all done at below-freezing temperature, to assure that there is no thawing of the product during the preparation and packing stages.

Because shells are hard and thorny, and the crab meat must be maintained in frozen condition at all times for full retention of quality, saws are the primary tool. The principal sawing room, where the blocks are cut and the legs



Five Over-the-Road haulage units can be loaded at once at this truck dock of the new, modern Bellingham Cold Storage, where the cost and damage of handling frozen fish is reduced to a minimum.

BELLINGHAM COLD STORAGE CO.

Packing King Crab Legs in the Bellingham Cold Storage for Wakefield's Deep Sea Trawlers, whose consumer packages for 13 years have been prepared exclusively in this custom plant.

sectioned and split, is equipped with a battery of eight Butcher Boy band saws for cutting frozen food.

While all of the work is done in the Bellingham plant and by the Bellingham crew, the Wakefield company maintains supervisory personnel for its extensive operations there, where the quality of workmanship and standards have contributed significantly to the standing of Wakefield King Crab in fancy food markets throughout the United States.

● Following its policy of keeping abreast of developments benefitting the fishermen and fishery operators, Bellingham Cold Storage Co. manufactures Acronize antibiotic ice under license from American Cyanamid Co. This is being used to a steadily increasing degree as fishermen and the firms to which they sell prove to themselves the advantages long since laboratory-tested.

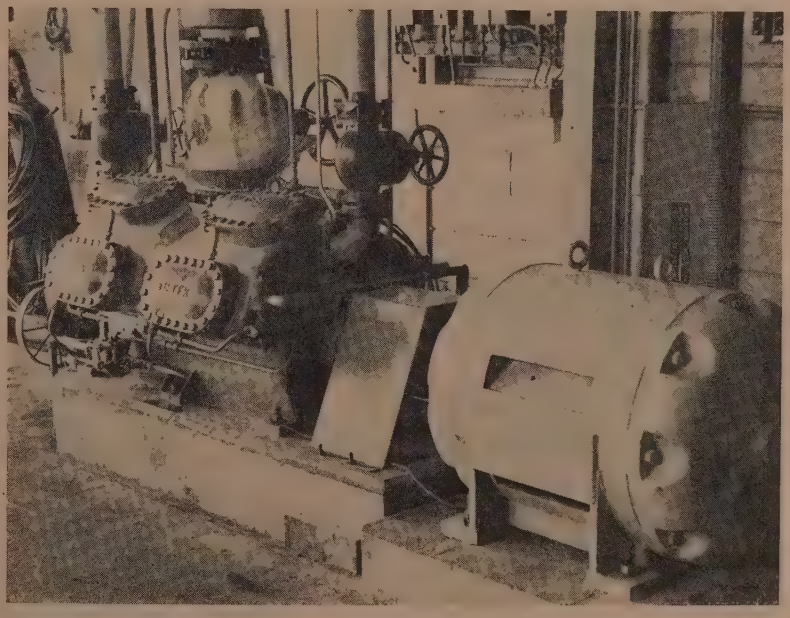
The plant stores 1,500 tons of ice at the low temperatures favored by fishermen, and the face of the dock on the boat haven side is equipped with modern ice delivery facilities.

Refrigeration of the additional facilities at Bellingham—sharp freezers and storage for 8,000,000 lbs — was achieved with the addition of only a single compressor to the plant engine room. This was possible because of the exceptional capacity of the new compressor, plus an already adequate compressor complement.

The new compressor is a 16-cylinder four-bank Vilter, powered with a 150 hp. motor and delivering 140 *tons of refrigeration effect*, in spite of its extraordinary compactness.

● In addition to its growing business with the fisheries — to accommodate which the 1960 extensions were undertaken—the Bellingham Cold Storage Co. is an important factor in serving vegetable and fruit freezers of northwest Washington.

Stokeley-Van Camp have a preparation plant immediately adjacent to the cold storage, whose facilities it uses for freezing and storage; Kelley-Farquhar & Co. utilize the cold storage plant extensively, and there are numerous other agricultural products freezers utilizing the older division of the plant, while the new structures are devoted wholly to fish and sea foods.



140 Tons of Refrigeration are produced daily by this compact compressor, a 16-cyl. Vilter, powered with a 150-hp. motor. Its capacity is so great, despite its small size, that it was the only additional compressor required by the new fish products division of the Bellingham Cold Storage.

CONGRATULATIONS

To the BELLINGHAM COLD STORAGE CO.

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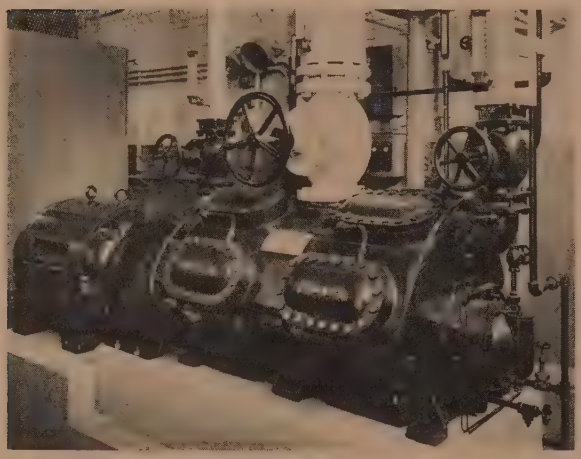

This compact, 16-cylinder VMC Vilter compressor, powered with a 150-hp motor, alone delivers 140 tons of refrigeration.

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Monterey Sardine Co-op Expected to Market Fish

● Although Aug. 1 supposedly opens the central California sardine season, as has happened so often in the past, not a purse seiner put to sea nor did any cannery get steam up in its boilers.

. According to well informed sources in Monterey, the Monterey Purse Seiners Association, the boat owner's group, are forming a cooperative. Canners would order so much fish per day from the boat owners group, and the orders would be filled by members of that association.

As far as cannery labor is concerned, a new contract was signed Aug. 1 between the cannery workers union and cannery operators. Women got a raise of 2¢ per hr., to $1.69; the base rate for men was raised 3¢ to $2.00, and raises of from 4 to 6¢ were given for some classified jobs, making these pay from $2.00-$2.40.

As a matter of fact there have been only meager signs of sardines — the weather has been foggy, and the plane that spots fish hasn't been able to operate much of the time.

A bait boat out of Morro Bay was able to land fish now and then, but reported schools were scattered and not very big.

● Monterey purse seiners and lampara boats finally set out after sardines on the night of Aug. 15, after an ex-vessel price of $35 per ton had been agreed upon. Most canners are also reported to have agreed to pay half of any trucking costs, fishermen paying the other half.

Some 115 tons of fish were brought in by the lampara boats. This catch consisted of "homesteaders"—very large fish that are believed to have stayed in the Bay most of their lives, and these fish were picked practically off the beach.

Despite some rumors that not all of central California's seven canneries would open this season, it was reported that all were ready to receive fish. They are: J. D. Packing Co., San Francisco; Santa Cruz Canning Co., Moss Landing; and Enterprise Packers, San Xavier Fish Packing Co., California Packing Corporation, Carmel Canning Co., and Hovden Food Products Corp., Monterey.

"Bud" Wyatt Navigates Caribbean Sea Area

F. D. "Bud" Wyatt, vice-president, director and manager of Cia. Wilbur-Ellis Peruana, Lima, Peru, spent most of his sabbatical leave traveling.

Following conferences at company headquarters in San Francisco, Mr. and Mrs. Wyatt, accompanied by their three sons, and daughter-in-law, took off via station wagon for Miami. At Puerto Rico, Mr. Wyatt had chartered a schooner in which the six Wyatts cruised throughout the Caribbean.

U. S. Net Plant Makes Knotless Trawl Nets

The U. S. Net & Twine Co. factory in Long Beach, Calif., recently became the first U. S. manufacturer of knotless trawl nets, it was announced by Ben Ichiyasu, manager.

The U. S. Net plant, established only last year, has expanded into two new warehouses and has increased production of all sizes of webbing. The factory has a net yard attached, equipped with a Puretic power block for handling nets quickly and safely. Sales of U. S. Net & Twine products are handled in Southern California by Stewart's Supplies of San Pedro.

Henley Heads W-E S. F. Frozen Department

Wayne Henley, who joined Wilbur-Ellis Co. some three years ago following service in the Marine Corps, has been appointed manager of the San Francisco frozen fish department.

R. D. Ladd on Seattle Chamber's Directorate

Robert D. Ladd, vice president and general manager of the Pacific Marine Supply Co., in August was elected a trustee of the Seattle Chamber of Commerce.

He already is chairman of the marine exchange and of the Chamber's maritime division.

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Peru's Problems of Leadership

Front Rank in Fish Meal Proves a Place of Peril

● In Peru last month, the fish-meal industry, which for several years has shot up like a rocket, seemed dangerously ready to blow up like a rocket.

Peru's fish-meal production, doubling and redoubling year after year, seemed last month to have run into a glut in the world market, a condition which other countries sometimes ascribe to the rise of Peruvian production. World prices had dropped to below $60 per ton from a high of $140. At the same time, other nations' producers were taking strong measures to protect their fish-meal business, some of them striving to recover markets they had lost to Peru:

Chile was planning to raise its production capacity to 100,000 tons a year by adding nine new plants;

The Scandinavian countries were lowering their prices;

The British herring industry board was petitioning the government for a subsidy to make up for the low price of surplus herring, raw material for fish-meal;

In the US, Atlantic Coast menhaden fishermen were asking for Government support to protect the fish-meal industry which is the main market for their fish.

In the Los Angeles market, as reported by the U. S. Bureau of Commercial Fisheries' Market News Service, Peruvian fish-meal prices dropped from $106-$109 per ton for 66% protein meal ($1.60 per unit of protein) in late June, to $89 per ton for 65% protein meal ($1.35 per unit) in early August—a decline of nearly 16% in hardly more than a month.

Peruvians Seek Solution

● In Lima the Sociedad Nacional de Pesqueria (National Fishery Association), an unofficial industry organization made up of managements of fishery industries, got the 100-odd fish-meal plant managements together early in the summer and discussed a number of measures to try to bring some relief and stave off what some considered impending disaster.

First it was proposed to allocate production among the plants. The allocations, according to Bureau of Commercial Fisheries reports, would permit each existing plant to produce up to capacity, and the total would be over 1,000,000 tons a year, which most observers considered far too much. The proposal was rejected, partly because plants not yet in production and having no production history on which to base a quota, would be allocated only 40% of their authorized capacity according to their Government permits.

A second committee brought in to a subsequent meeting a proposal to class the plants (including those not yet in production) in four categories and reduce production in each category by an across-the-board percentage acceptable to all managements in each category. This was also turned down.

● The committee which was struggling with the problem as we went to press consists of representatives of big and little existing plants, and also of plants not yet in production. This committee is considering such measures as declaring a Government-enforced closed season on anchoveta, prime source of raw material. Sentiment, however, is strong against any sort of Government intervention in the industry. Peru has a strong tradition and a firm policy of freedom for private enterprise.

Half-Year Exports Exceed Entire Trade for 1959

● Exports of fish meal from Peru during the first half of 1960 reached 282,711 metric tons, being almost 5,000 tons above the exports for all of 1959. In that year foreign shipments were 278,056 metric tons, with 20,062 tons of domestic consumption and a carryover of 45,882 tons into 1960, thus accounting for 1959 production of 344,000 tons.

Exports in metric tons during the first half of the current year were:

January	45,428
February	62,594
March	33,697
April	62,063
May	52,422
June	26,507
Total	282,711

The decline in June was due primarily to a fishermen's strike, and also in some degree to shortage of fish, a condition normally associated with the onset of the winter season in the southern hemisphere.

Principal markets to which Peruvian fish meal was exported during the first half of the current year were:

Country	*Metric Tons*
Holland	88,420
Germany	61,932
United States	29,285
England	32,878
Belgium	21,204

The authoritative source from which these late figures were received comments as to market:

"Current sales are reported being made at around U. S. $56.00 per m.t., with a tendency to rise. Producers are individually seeking to market their production, several having gone personally to Europe for that purpose. There is considerable confusion in the local market and all efforts to achieve orderly marketing have apparently broken down."

Curtailment Conferences Continue

● Peruvian industry concern with the fish meal market situation continued active through August, and a private message received by *Pacific Fisherman* near the end of that month said:

"The industry is still very much concerned about the general situation and, while no workable system of controls has yet evolved, producers are meeting with regularity on the subject. With the great number of plants, you can appreciate that a quota system would hurt some more than others. Present thinking is in terms of either a bag limit to the number of tons of fish that could be taken a year, or cutting the working week to four days of fishing."

Half-Million Tons Expected

● The same well informed source has this to say about prospective production:

"Overall theoretical capacity of the

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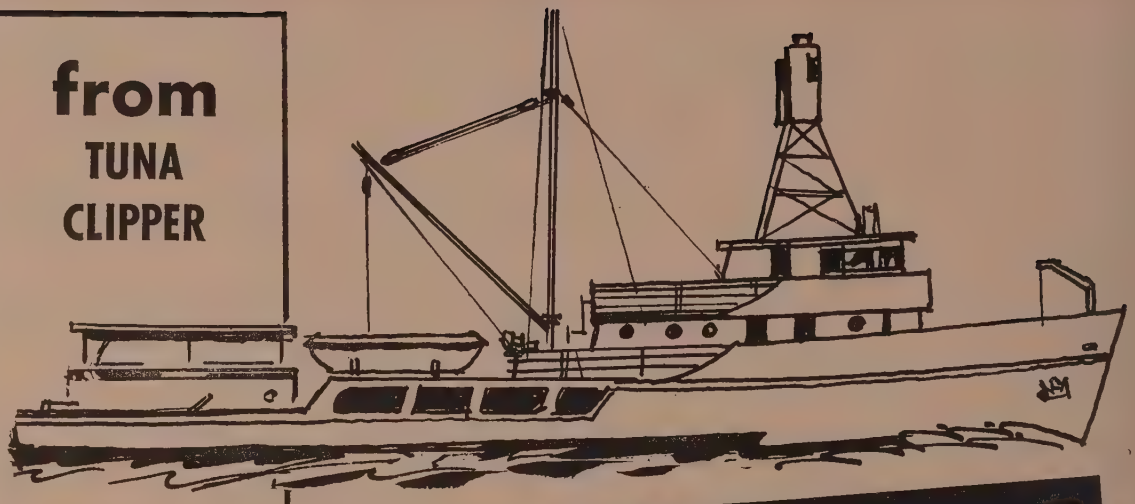

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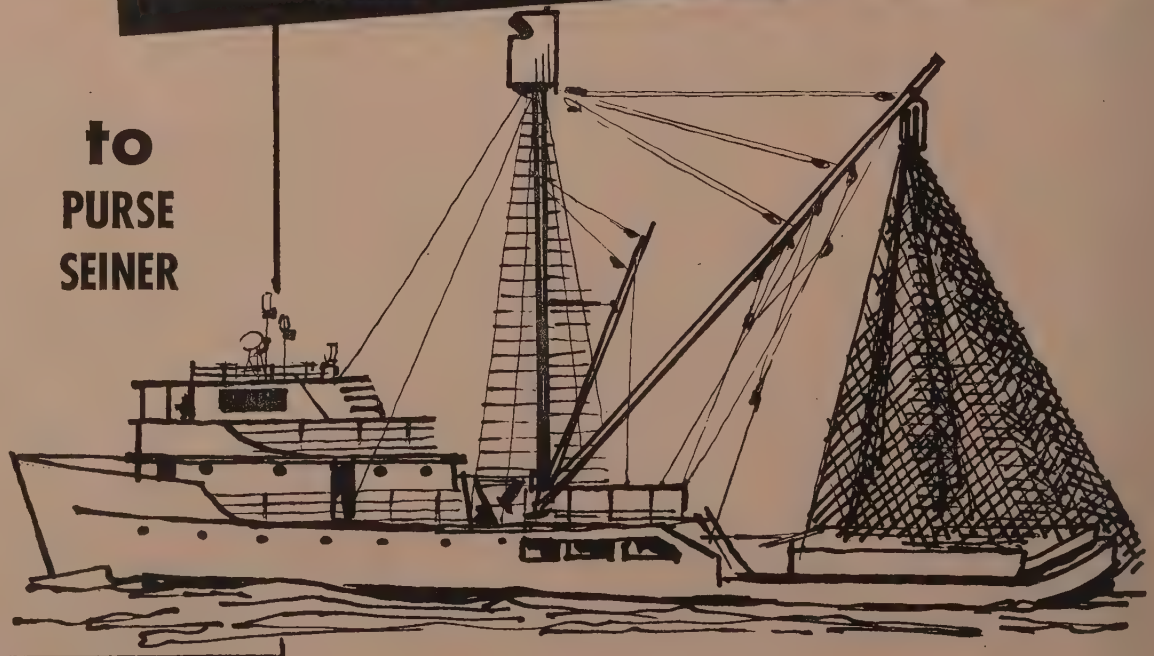


industry is of course very great, but theoretical capacity is a lot different than what actually is produced. For example, we see figures where the industry could produce 1 million tons, but this would presume a constant operation, finding fish at all times, no bravezas or work stoppages. In point of fact, we would judge production for the calendar year 1960 to be not much more than 500,000 tons.

"That in itself is a lot of fish meal, of course, but nowhere near the so-called 'theoretical' capacity. By and large, there is no stocking up of meal in Peru. Fishing in Callao has been poor or nil the last 6-8 weeks, which has tended to give a firming tendency to the internal market."

Future? A Riddle

● Plainly stated, the situation at this writing seems to be that the world is producing more fish-meal than the world can use; that prices are sinking and disaster threatens many fish-meal producing firms; and that as usual each producing country and each firm would like to see production curtailed — by somebody else. Meanwhile — fish-meal being an important fishery product, and Peru being the biggest producing nation — the big question in many minds is:

What's going to become of Peru's fish-meal industry in the squeeze of falling prices, competition, and failure to control itself?

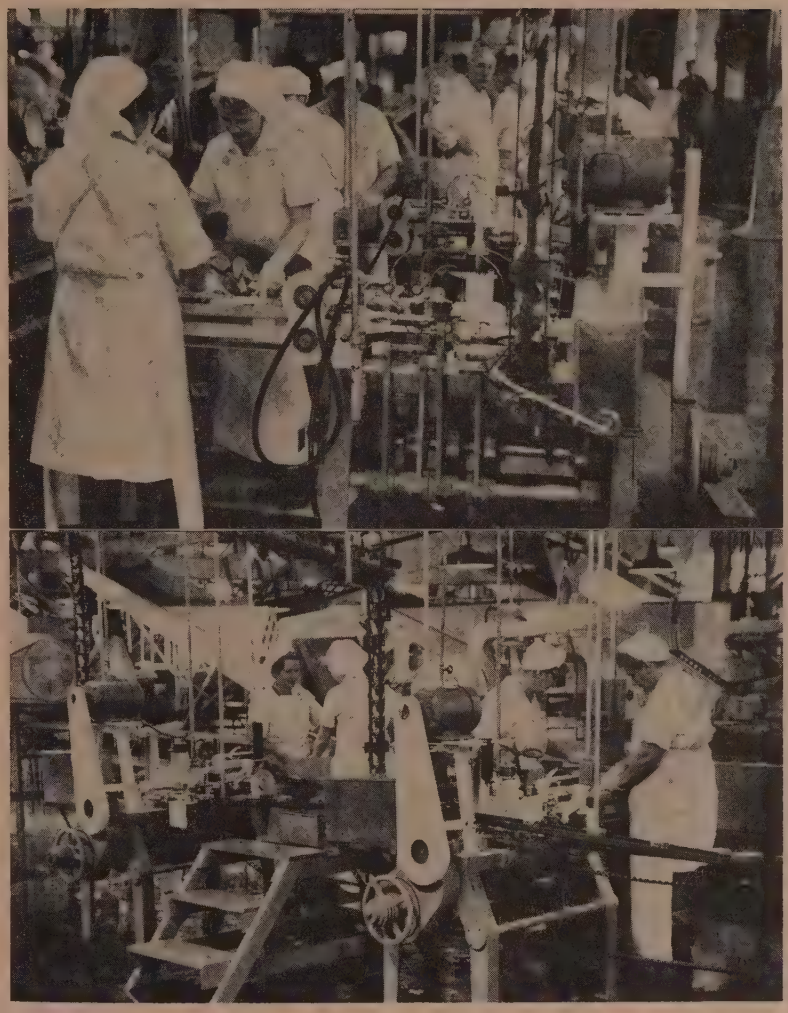
The best-informed opinion seems to be divided. Some feel that a violent period of shakedown is imminent, during which the weak-sister plants will go out of business while the well-financed and well-managed firms will weather the storm and eventually find smoother sailing in a more stable world situation.

Others seem to feel that the Peruvian government, in the public interest and to protect the growing revenues it collects from the industry, will step in and enforce some sort of production control. This goes against the grain, but some feel that it is a choice between Government intervention and sudden death.

Peru a Natural Leader

● Yet it seems certain that Peru will always hold a leading position in the world's fish-meal industry, for one great over-riding reason: The enormous wealth of fish that fills its waters close to shore. With apparently unlimited quantities of anchoveta close to shore, easy to catch and cheap to transport to the plants, Peruvian manufacturers expect always to be able to produce a good fish meal at relatively low costs.

Machine Fills ¼-Lb. Salmon Cans



¼-Lb. Filler; Both Sides of the Subject. Here are the two prototype Rooney Machine Co. ¼-lb. filling machines at work in the Columbia River Packers Association cannery at Bellingham, Wash. Upper photo shows how the two operators feed the steaks into the machine. Plunger in vertical cylinder in right center puts fish in the can. In the background, **Vern Larson,** cannery superintendent, keeps an eye on the photographer. Lower photo shows the discharge side of the two machines working in parallel.

● Machine filling of quarter-pound salmon cans became an industrial reality during the Puget Sound Sockeye season of 1960.

Believed to be the first quarter-fillers ever to go into actual salmon canning production, two Rooney Machine Co. quarter fillers were installed in the Columbia River Packers Association cannery at Bellingham.

Despite the fact that they were prototype machines on the first production run, they performed quite effectively. "I've seen a lot of hand filling that was not as good," observed Vern Larson, superintendent of the cannery, who probably has lived closer to the machines in the past few months than anyone except W. E. Rooney himself.

In operation on Sockeyes, each filler delivered 65 filled cans per minute. Two women were feeding each machine, and three on the patching table were sufficient to correct any faults of filling for both machines.

Salmon for the Rooney machines are sliced to appropriate thickness for quarter-pound flats on a Draper Engine Works Co. gang knife. The steaks are fed flat into the fillers, care being taken to maintain continuity of feed to two converging neoprene belts which carry the steaks between them into the metering element of the filler.

Late Season Sky Brighter For B.C.'s Fish Industry

● Fishermen and packers in British Columbia were anything but happy about their salmon operations this year, but the situation improved slightly as the season advanced and their experience, bleak as it might have been, was no worse than what had been predicted.

So far as Sockeye were concerned, the staff of the International Pacific Salmon Fisheries Commission hit the target with impressive accuracy. The commission's long-range prediction program, so far based only on five years' close observations, came up with the figure of a permissible catch 1,000,000 fish as a minimum this summer and a maximum of 1,200,000 fish each for Canada and the U. S.

At close of U. S. fishing that nation's catch in the Fraser system stood at 1,162,314 Sockeyes and there was little prospect of this total being greatly increased before the season's end. The final Canadian catch exceeded the American total by approximately 100,000 Sockeye.

There was some consolation in the fact that it was the best Sockeye run *of the cycle* since 1912 so far as catch was concerned, although individual fish were relatively small.

The Chilko spawning grounds comprised about 75% of this year's Sockeye from the Fraser.

At one time during the season it appeared as though the B. C. Sockeye pack would not exceed 150,000 cases, and some packers were describing the situation as bordering on the catastrophic. However, this assessment moderated as the pack edged higher, with every chance that the pack would show an appreciable margin over 200,000 cases—nothing to whoop and holler about but not the worst on record, nor as low as some had feared.

● However, with the total pack of all B. C. salmon only 444,876 cases at August 13, it required an optimist to look for as much as 700,000 cases by the season's end, and even that figure would make the showing the worst in 50 years, with the one exception of 1931 when economic rather than operational conditions resulted in a sharply restricted pack. In that depression year the banks were sitting tight on money and canneries were forced into idleness. This season some of the major canneries were relatively idle, but because of lack of fish.

One of the bitterest disappointments has been the scanty showing of Pinks, usually one of the main volume contributors to the B. C. salmon industry. The Pink catch at mid-August was considerably less than half what it was at the corresponding period two seasons ago. It seemed obvious that the decline was due to some inexplicable ocean conditions, because the migration two years ago had shown no sign of weakness and some 600,000 Pinks had been caught in the Queen Charlotte area alone. This season, fishing in the Skeena had been of lacklustre proportions and by mid-August all canneries were down in that area except Oceanside at Prince Rupert. J. H. Todd & Sons' Klemtu cannery remained closed all season. The big Namu plant closed earlier than usual.

There was evidence of a satisfactory Sockeye escapement because of some arbitrary closures, but while Chilko fish were moving up the Fraser according to schedule, indications were that some of the early runs to the Stuart and other upper reaches of the river were not showing customary vitality and were reaching the spawning areas in a bruised condition.

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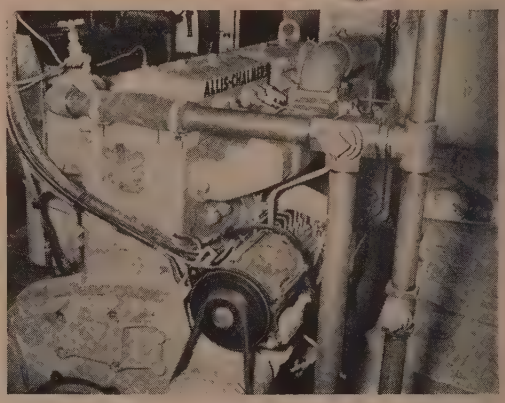

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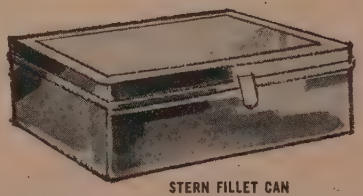

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FOOD FISH MARKETING

Section of PACIFIC FISHERMAN —

News and Views of National Trade in Fish and Shellfish

September 1960

Alaska Red Prices Hold Despite Increased Pack

● New-pack American Red salmon wears the same price tags as adorned the goods last spring, and this in spite of a pack substantially exceeding 1 million cases for the first time in a good many years.

Notwithstanding this abundance of Red goods, the market leaders felt their prices should be continued unchanged, presumably because of shortages in salmon of other grades.

After all, *salmon* is still in light supply; and Reds have a popularity which has not been lost in spite of years of scarcity and a price curve which is taking on a plateau form at an elevation which was counted a peak when it was first attained.

At presstime some Seattle canned salmon distributors were quoting $25 per case of tall Pinks and $22 per case of tall Chums; with two-dozen cases available at $12.60 and $11.10, respectively.

Offers were all strictly subject to confirmation, and one house specified shipment by October 1.

However, from the standpoint of available supply, consideration must be given to the fact that in 1959 there were 175,000 cases of Pinks from Puget Sound—and this year there will be none. Further, imports of Pinks from Japan totaled about 460,000 cases within the past year, and this year it is certain Japan will have very much less than this available for the United States market.

Pinks, then, will be in short supply. Chums promise a reasonably normal pack.

What Happened to the Pinks? . . . . . How Can We Get the Answers?

● The disappointing run of Pink Salmon to Southeast Alaska in 1960 casts the strong light of emphasis on Man's scanty knowledge of this species.

He can predict the behavior of Reds with fair success—or at least it was done *this* year, and with better than fair success; but Pinks defy forecast and Man's knowledge of the factors affecting *O. gorbusha*, its productivity and survival is thin indeed.

The point is made clearly in a recent market letter by L. A. Petersen, sales manager of New England Fish Co., and one of the expressive voices of the salmon industry, who writes:

"The educated consensus, and admittedly based on guesswork, is that something caused poor ocean survival of the heavy seaward migration of Pink fingerlings in the spring of 1959. While considerable research has been conducted on Red salmon in Western Alaska, and Sockeye salmon in the Fraser River watershed, the results of which have given many answers of value to the regulatory bodies and the industry, only miniscule efforts at research on Pink salmon have been conducted in the past, due to lack of funds.

"Now that Alaska has been granted statehood, and regulation of the fisheries is under state control, research on the resource should go hand in hand with regulation. But obviously the new state is not in financial position to mount comprehensive research projects, nor would the industry be in position to finance research in addition to that for which it has provided funds for many years. It would therefore seem highly important, from a national standpoint, for the Interior Department of the Federal government to divert some funds from less worthwhile projects to a program of Pink salmon research in the hope of saving and building this resource."

● Mr. Petersen does not specify the "less worthwhile projects" which he may have had in mind.

It does seem, however, that his suggestion is sound; and that it should be brought emphatically to the attention of the American Fisheries Advisory Committee, created by law to advise the Secretary of the Interior on allocation of the large amounts of money available under the Saltonstall-Kennedy Act.

The committee met in Seattle in August. Did it get a chance to examine this notable need?

Seattle Market

Market prices currently quoted at presstime by Pacific Northwest brokers and cannery sales department, cases of 48 tins, unless otherwise specified, good quality, as reported by the U. S. Bureau of Commercial Fisheries Market News Service.

Items and Packages	Per Case
Puget Sound	
Sockeye, halves	$24 -25
Sockeye, quarters	-14.50
Alaska	
Red, talls	36 -37
Red, halves	24 -25
Pink, talls	24 -25
Pink, halves	13.50
Pink, 4-lbs. (12)	-25
Med. Red, talls	-31
Med. Red, halves	18.50-19
Med. Red, quarters	-11.50
Chum, summer, tall	-22.50
Chum, summer, halves	12 -12.50
Chum, fall, 4-lbs. (12)	-23
Chinook, talls	31 -32
Columbia River	
Blueback, halves	26 -27
Blueback, quarters	14.50-15
Chinook, fancy, halves	26 -27
Chinook, fancy, quarters	14.50-15
Chinook, choice, halves	-18.50
Chinook, choice, quarters	-11.75
Tuna, Northwest Pack—	
Albacore, fcy., 7 oz.	13 -14
Yellowfin, s/pack, 7 oz.	11.00-
Yellowfin, chunk, 6½ oz.	9.50-10.10
Tuna, Columbia River Pack	
Albacore, fcy, 7 oz.	14.85-15.25
Albacore, fcy., 3½ oz.	9.10- 9.15
Albacore, chunk, 6½ oz.	10.50-13.25
Albacore, chunk, 3 oz.	6.50- 8
Lightmeat, fcy., 7 oz.	14.25
Lightmeat, fcy., 3½ oz.	8.55
Lightmeat, chunk, 6½ oz.	11.00
Canned Shrimp—	
Northwest: 4½ oz. wet pack	7 - 7.25
Alaska: Tiny (over 17 per oz.)	7.00- 7.25
Small (10-17 per oz.)	- 8
Medium (6-9 per oz.)	-10
Canned Crab	
Dungeness, 24, 6½ oz.	13 -13.25
Dungeness, 24, 3½ oz.	- 8.25
King, fcy., 7½ oz.	-32
King, std., 24, 7½ oz.	-16.10

Oystermen Keep Eyes On Science and Technology

● Twenty-fourth annual meeting of the Pacific Coast Oyster Growers Association held in Tacoma Aug. 18-20, emphasized the interest of the industry in science and technology.

Where these matters were under consideration, attendance was highest and attention closest.

Running at the front in interest was the continuing problem of water pollution, and this from the scientific aspects of biology and toxicology as well as technological means of reducing or controlling pollution.

This matter of pollution saw the association maintain its firm stand, expressed in a vigorous resolution.

● The oyster growers spelled-out specifically what they want the Washington State Pollution Commission to do in respect to the control of sulphite waste liquor pollution, making these demands:

1. That each sulphite pulp mill be required to construct disposal facilities which will exclude at least 85% of its waste sulphite liquor from the state's waters;

2. That a reasonable but adequate dispersal area be established around each mill, after consultation with the Washington Department of Fisheries, and considering the requirements of other water users;

3. That the tolerance for sulphite waste liquor outside these authorized dispersal areas shall not exceed 3 parts per million.

The resolution cites research which shows that SWL concentration in excess of 3 ppm. is unsafe for various forms of marine life.

It points out also that the Gunter-McKee recommendations by scientists employed by the Washington State Pollution Commission have been declared unsatisfactory by numerous organizations, largely because they do not pretend to apply generally to several forms of marine life which are invaluable resources of the waters polluted.

Organizations cited as joining the Pacific Coast Oyster Growers Association in this position include: Willapa Harbor Oyster Growers Association, North Puget Sound Oyster Growers Association, Olympia Oyster Growers Association, Tacoma Sportsmen's Club, Washington State Sports Council, Coast Oyster Co., Inter-Tribal Council of Washington Indians, and Northwest Fisheries Association.

● Scientific session of the annual meeting was an overflow session, with the attendance drawn from California, Oregon, Washington, Alaska, and Atlantic states. It was presided over by Dr. Albert K. Sparks of the University of Washington College of Fisheries; and was devoted to a broad consideration of biological matters as well as the technology of freezing.

● New president of the PCOGA for 1960-61 is Stanley C. Gillies of South Bend, Wash., who has been vice president for the past year, and who was chairman of the 1960 Oyster Products Cutting.

Bob O. Bower of Olympia, Wash., was elected vice president; and Charles R. Pollock was chosen secretary-treasurer for the 24th consecutive time.

Trustees newly elected for three-year terms include: Richard C. Hicks of the Simmons Oyster Co., Olympia; David C. McMillin, Olympia Oyster Co., Shelton; Nat Waldrip, Waldrip Oyster Co., Shelton; E. "Jerry" Yamashita, Western Oyster Co., Purdy, Wash.

Wilbur-Ellis Executive Staff Positions Shifted

R. B. Young, vice-president and head of the New York office of Wilbur-Ellis Co., has been transferred to Los Angeles as manager of the southern division.

He takes the place of Ned Lewis, vice-president, and former manager, who has been made head of company-wide business development.

Mr. Lewis continues as WEC director and will have headquarters in Los Angeles where he joined the company in 1925. Mr. Young also started his WECo career in Los Angeles, in 1937.

Taking over as general manager, eastern division, with headquarters in New York, is Ray H. Mattson, son of R. B. Mattson, president of the company. Mr. Ray Mattson joined WECo in Seattle 10 years ago.

Harrison J. Pierce, who has been head of the New York frozen fish department, has been made managing director of the company's entire frozen food business. He has been with Wilbur-Ellis since 1953.

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Southern California Domestic Tuna Deliveries

Cumulative totals for 1960 through August 13, in tons, as reported by U. S. Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Clippers and Albacore Fleet	6,303	.....	12,424	16,366	....	35,093
Purse Seiners		3,675	2,192	50,456	125	56,448
Total 1960 through Aug. 13	6,303	3,675	14,616	66,822	125	91,541
Total 1959	5,983	4,990	34,220	41,204	314	86,711
Total 1958	6,134	9,788	35,588	48,976	1,711	102,197

1959 Sardine Carryover Is Priced to Sell

● With the 1959 California sardine pack almost gone, the price for the remainder was being quoted as: 1-lb. ovals (24s), $4.25-4.75; and 1-lb. talls $6.25.

Observers stated in San Francisco that there was some interest in the new pack but at prices which failed to arouse any enthusiasm among packers as far as the export trade is concerned. The export trade still remains the most important market for California sardines.

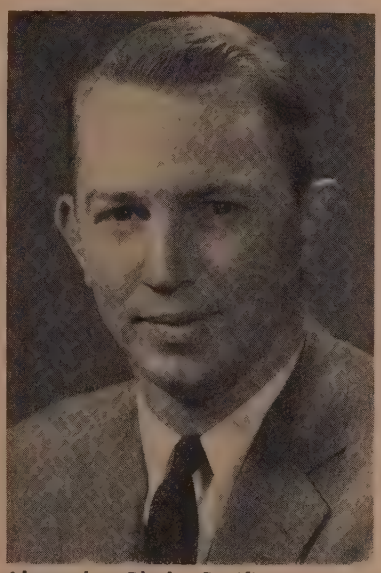
Japanese sardines were reported to be selling in the Phillipines for $7.75 in wooden cases. In order to compete California packers would have to put sardines into Manila at about $7.00 per case f.o.b. Since it costs about $1.30 to ship California sardines in fibre cases to the islands it is obvious that California canners can't compete.

Another depressing factor is the fish meal market. Last year when California sardine season opened fishmeal was selling at around $2.10-2.15 per protein unit. Now meal is selling for $1.55-1.60. This, coupled with increased cannery labor costs, puts California sardine packers in a most disadvantageous position as far as competition in foreign markets goes.

Murray Wheeler Visits Pacific Fish Promoters

Murray Wheeler, manager of the fish products promotion division of the National Fisheries Institute, spent late August on the Pacific Coast in conference with agencies which participate in the annual Fish 'n' Seafood Parade and other effective programs in which fish utilization is promoted cooperatively.

He notes in particular distinct upgrading in the character of American fish consumption, a trend which produces increased economic return in spite of a relatively static U. S. per capita consumption.



Alexander Black, Pacific manager of sales, promoted to national responsibilities by American Can Co.

Canco's Alexander Black Gets National Responsibility

Alexander Black, for some time American Can Co. western area manager of sales, with San Francisco headquarters, in August was appointed manager of the marketing division in the company's national headquarters.

The new appointment as marketing manager gives Mr. Black nation-wide responsibility for Canco Division advertising, marketing and sales promotion activities.

Mr. Black has a background of 15 years of diversified experience with the American Can Company, in which he started work in 1942 as an assistant buyer, subsequently serving as a sales representative, assistant district sales manager, and sales manager in Los Angeles. He next moved to the western area office in San Francisco, as commodity manager and subsequently served as assistant manager of sales before assuming responsibility as area manager of sales in 1954.

Export Interest Centers On Sockeye Quarters

● Considerable export trade developed in Fraser River and Puget Sound Sockeye quarters in spite of the price of $15 per case of 48, a new high for this pack. British buyers distributed their business in these goods on both sides of the boundary.

Sockeye halves, which can also be had from Japan, commanded little British interest at $25.

Two-dozen cases in these items were priced at 10¢ a carton over half the price for 48s.

British Columbia Domestic Salmon Prices Announced

Opening prices on canned salmon for the Canadian trade were announced in Vancouver late in August by principal packers. The figures:

Sockeye—24/1-lb., $22; 48/½-lb., $25; 96/¼-lb., $29.

Coho—24/1-lb., $17.25; 48/½-lb., $20; 96/¼-lb., $24.

Pink—24/1-lb., $12.50; 48/½-lb., $13.25; 96/¼-lb., $17.25.

Chum—24/1-lb., $10.50; 48/½-lb., $11.50; 96/¼-lb., $14.25.

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Pacific's Frozen Oyster Items Make Long Strides

● Frozen Pacific oyster products — including frozen oysters—are making long and striking strides in quality and in the conquest of consumer markets.

This was revealed at the 27th annual meeting of the Pacific Coast Oyster Growers Association, held in Tacoma, Wash., Aug. 18-20, and featured by the annual exhibition, cutting and judging of oyster products.

Particularly notable were the breaded frozen oyster goods, and the marked improvement of the frozen products in contrast with the displays of a few years ago.

Breaded oyster slices, cut from oysters frozen in plastic tubes; then breaded and packed in consumer cartons, were particularly interesting in their uniform attractiveness.

Another product was a slice of frozen oyster meats, breaded, and prepared specifically for the hot sandwich trade. This institutional item was appropriately called "oysterberger."

Thoughtful oystermen showed sincere conviction that frozen items of the general type displayed at the convention bear excellent promise for the future of Pacific oyster marketing.

● Pacific canned oyster items showed up favorably, although examiners continued somewhat critical of the quantity of drained oyster meats in the oyster stews. It was noted that this ranged from 0.9 to 1.5 oz. in the No. 1 Eastern Oyster tins; and from 0.7 to 1.3 oz. in the buffet cans.

Standard canned oysters examined were regarded with particular favor, judged as a whole as well as on the basis of individual cans.

Stanley Gillies was chairman of the oyster products exhibit and cutting, assisted by Dr. G. Ivor Jones of the National Canners Association. Judging was in charge of Mrs. Bob O. Bower, Mrs. Stanley Gillies, Mrs. Earl R. Brenner and Mrs. Lee J. Wiegardt.

Southern California Receipts

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
San Pedro	14,809	3,490	15,511	77,718	125	111,653
San Diego	3,366	328	7,543	8,895	...	20,132
Total 1960 through Aug. 13	18,175	3,818	23,054	86,613	125	131,785
Total 1959	13,853	5,150	46,949	74,017	314	140,283
Total 1958	14,335	10,111	40,314	75,549	1,716	142,025

A. K. Tichenor, Salmon Pioneer, Dies at 88

A. K. Tichenor, 88, rugged pioneer of the Alaska salmon industry, and former president of the Alaska Packers Association, died at his home in Alameda, Calif., last month.

Mr. Tichenor retired from the salmon canning firm in 1951 after 48 years of service, remaining as a director.

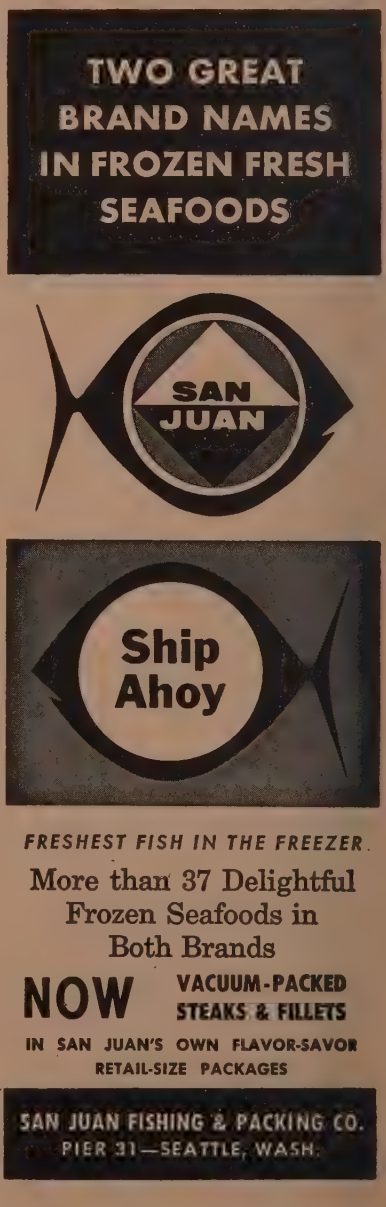
He was also a director of the Shipowners & Merchants Towboat Co., the West Sacramento Co., San Francisco Maritime Museum, and a former director of the California Packing Corporation.

He leaves three sons, Dr. Austin P. Tichenor, Piedmont; and Stephen and DeWitt, Oakland.

The Name Is Deibert

Through an error the name of Dick Deibert who recently joined the sales department of Wm. O. Dooms Co., Oakland seafood brokerage house was misspelled in the last issue of *Pacific Fisherman*.

Pacific Fisherman regrets this slip, and wishes Mr. Deibert success in his new position. He was formerly with the fish meal and oil, and frozen seafood department of Wilbur-Ellis Co.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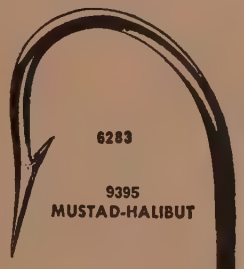

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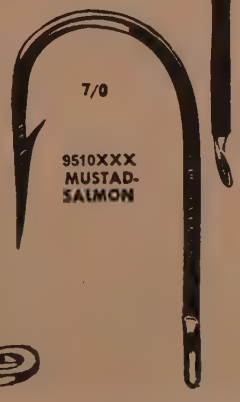

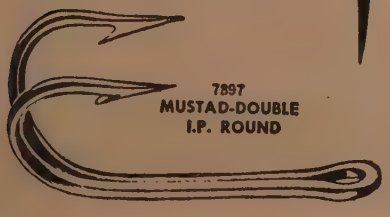

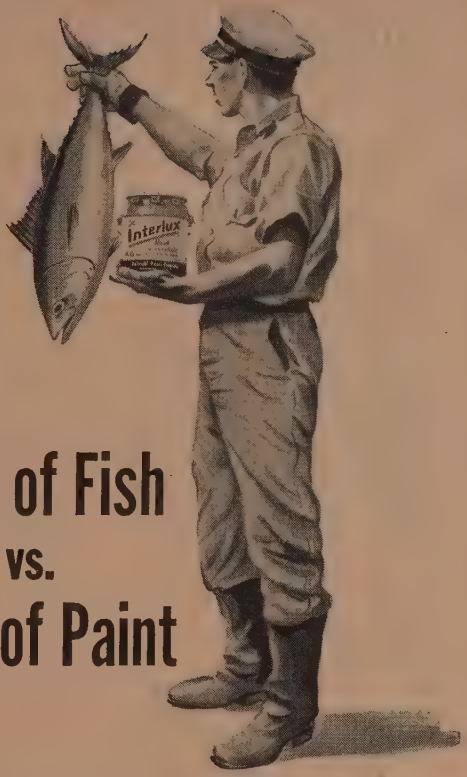

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"Strength," says Captain Ross, "is what you need in a lobster boat like mine. I've got an Allis Chalmers engine that delivers 85 h.p. on the shaft . . . but getting this horsepower to the wheel is where my S-N gears really deliver. In five years of rugged service, they have stood up perfectly. I'd recommend them to any owner who wants rugged, trouble-free service." See your S-N distributor or write direct. The Snow-Nabstedt Gear Corporation, Hamden, Conn.

YOUR BEST BUY IN DEPENDABLE GEARS

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Transmission Engineers
FOR OVER HALF A CENTURY

S. F. Fish Trade Cool Toward Oakland Move

San Francisco's wholesale fish industry has no intention of moving across the Bay to Oakland, according to Joseph C. Tarantino, managing partner of Bell Smoked Fish Co., and chairman of the Fish Pier Committee, composed of San Francisco wholesalers.

Mr. Tarantino said that the wholesalers had been approached by the Port of Oakland to make the move.

"The wholesalers are interested in getting a fish pier here in San Francisco and we're confident that the San Francisco Board of Harbor Commissioners will provide us with adequate facilities," said Mr. Tarantino. His committee is working with the Harbor Commission on a master plan for modernization of Fishermen's Wharf. The group hopes to include a fish pier adjacent to Fishermen's Wharf.

The pier, in contrast to the present wharf, would be a strictly working and not a tourist proposition. It would provide a place where fishermen could unload their catches for wholesaling and processing.

Oakland is planning to construct a fish pier at the foot of Fifth Ave. in the Oakland Inner Harbor and had invited Mr. Tarantino's group to inspect the site.

The Fish Pier Committee, according to Mr. Tarantino, includes the California Shellfish Co., F. Alioto Fish Co., Bell Smoked Fish Co., Tom Lazio Fish Co., Harbor Fisheries, A. Puccini & Sons, Standard Fisheries Corp., and Western-California Fish Corp.

Charles Z. Frey, Kadiak Veteran, Passes at 90

Charles Z. Frey, former vice president and sales manager of the Kadiak Fisheries Co., died at his home in Seattle early in August. He was 90.

He was a vigorous and effective force in the salmon industry he served for many years. He went to Alaska first in the Gold Rush days and was active in mining development. He was one of the organizers of the Kadiak Fisheries Co. in 1912, and served it until his retirement in 1946.

Cowen Names Hansen Honolulu Field Broker

M. S. Cowen & Co., San Francisco seafood factors, is now represented in the Hawaiian Islands by A. H. Hansen Sales, Ltd., Honolulu, well known food brokers.

TUBBS ROPES

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Commercial fishing is a big job . . . a tough job . . . and a lot depends on rope. That's why Tubbs has such a large selection of ropes—all specifically designed and tested for the professional fisherman.

Tubbs Extra Superior Manila—Selected top grade Manila receives special lubrication and water repellent treatments. Tough and durable. Also available copper treated for mildew resistance.

Tubbs Nylon Rope—Twice the tensile strength of Manila plus elasticity and easy-handling surface. Rot and mildew resistant.

Tubbs Dacron Rope—Excellent resistance to abrasion, sunlight, rot, and marine organisms. Half the elasticity of nylon.

Tubbs High Tensile Polyethylene—Half again as strong as Manila, rot resistant, and buoyant.

For complete information about all Tubbs ropes write Dept. A-3

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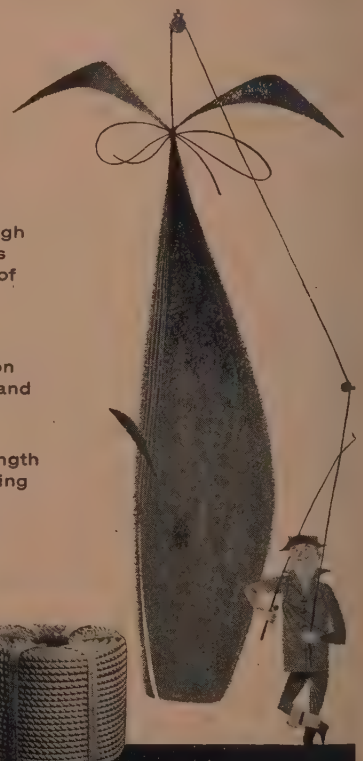

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Main Office: 200 Bush St., San Francisco 4, Calif.
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Crowther to California; Johnson to Washington

H. E. Crowther, former chief of the Division of Industrial Research of the Bureau of Commercial Fisheries, Washington, D. C., came to California last month as Area Director for California, and Donald R. Johnson, former area director, went to Washington for a year's executive work and training in various BCF offices.

The moves are part of a new program worked out by Arne J. Suomela, Commissioner of Fish & Wildlife, to broaden and increase the experience and skills of Bureau executives. Other moves will follow, it was announced.

In California, Mr. Crowther will work mainly in the fields of tuna, sardine and oceanographic research. In Washington, Mr. Johnson will serve in the Office of the Bureau Director, and also in Biological Research, Industrial Research, and Resource Development.

Frozen Salmon Priced Out of Japan Market

Scarcity of salmon supplies available to the Japanese, and the high demand for salmon for canning, is said to have raised the price of fresh and frozen salmon so high in Japan as to stalemate retail sales.

The 120 salmon specialists in the Tokyo Central Fish Market report that demand for salmon has evaporated under prices deemed excessively high.

Canco Enters Glass Container Manufacturing

Plans for the American Can Company's entry into the glass container manufacturing industry are outlined by William C. Stolk, chairman and chief executive officer, in a letter to Company stockholders. He described the program as a "significant step forward in the further diversification of the Company's operations."

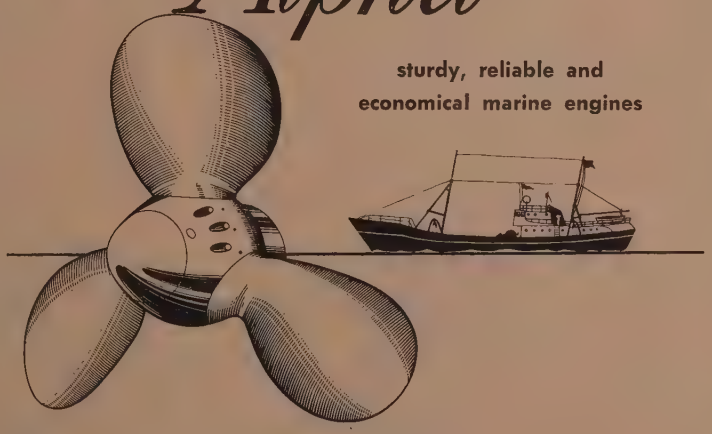
First plants of a newly formed majority-owned subsidiary, The American-Wheaton Glass Corporation, will be at Terre Haute, Ind., and at Minneapolis, Minn., Mr. Stolk said. The new company will have "plants strategically located throughout the United States as warranted by its volume of business."

Plans to enter the glass container industry had been under study for two years, Mr. Stolk said. One consideration was "the fact that glass containers, while differing in characteristics and often in function, have a much lower raw material cost than packages made of metal, paper or plastics."

TRAWLERS • TUGS • COASTERS . . . FOR FISHING BOATS •

B&W Alpha

sturdy, reliable and economical marine engines



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Reversing gear or controllable pitch propeller or direct reversible.

Manual or hydraulic controls.

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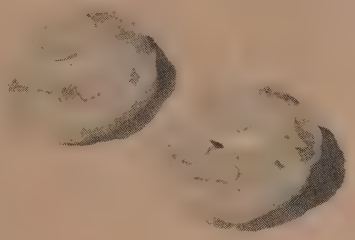
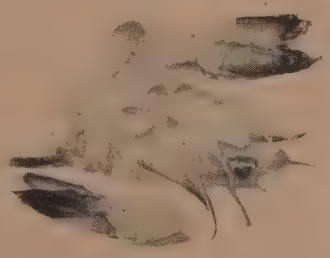
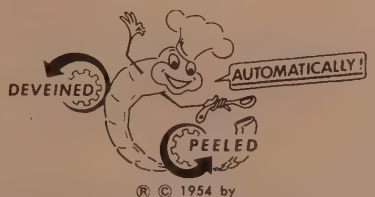


than there is in selling shells?



The Peelers Co. specializes in automatic shrimp peelers, deveiners and graders.



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THE ORIGINAL BONDED NYLON TWINE

NOW—*10 years' of solid experience* among fishermen and fish net manufacturers have *proved* that nets made of NYLOCK Nylon Twine catch more fish! In addition, NYLOCK's exclusive, U.S. Patented Bonding Process (No. 2590586) gives every net *all* of these advantages:

- Knot slippage is practically eliminated!
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The Original and Genuine In Use Since 1944

1. Easy to apply, no heating; dipping time—5 to 10 minutes. Quick to dry—6 to 12 hours.
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3. No burning of net. Not harmful to handle. No after stickiness.
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ALL OF WHICH ADD UP TO GREATER ECONOMY THRU' SAVINGS IN NETTING, TIME, AND MANPOWER.

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Introduction of the PAK-SHAPER in 1949 developed in tuna canning a greater mechanization than had come about in 30 years of previous growth. Subsequent experience has proved its value to the industry. A large percentage of major tuna operators now employ the PAK-SHAPER.

The PAK-FORMER, designed exclusively for Chunk and Grated Style Pack, is now available to the tuna industry under similar terms as the PAK-SHAPER.

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4-cyl.—60 shaft h.p. @ 2250 r.p.m.

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W. B. M. Wyness Chosen Fisheries Assn. Secretary

W. B. M. Wyness, who has taken over the secretarial duties at Fisheries Association of B. C., succeeding the late John MacDonald, is, like his predecessor, Scottish-born, and he was educated in Aberdeen.

A long military career began when Mr. Wyness joined the Scots Guards in 1933. Soon after World War II he transferred to a Seaforth Highlanders unit in the Imperial Army, and he served in North Africa, Sicily, Normandy and finally in Germany. He left the army in 1946 with the rank of major, and in the following year went to Canada with his family.

Soon after arrival in Vancouver he was engaged by MacMillan & Bloedel as safety director, and he continued in that capacity until being appointed safety supervisor for the Fisheries Association of B. C. last year.

Troll Boat Transactions

Dale Miller, Crescent City, Calif., former owner of the troller *Banshee*, has sold the craft to Bud Chrisman, also of Crescent City. Mr. Miller has purchased the troller *Bristol* and will fish for California Shellfish Co., San Francisco. The deals were handled by Dan Bohne & Son, Fishermen's Wharf, San Francisco.

work boat POWER!

Got a tough boating job? Here's the motor that takes it in stride—Evinrude's 1960 Big Twin! 40 horsepower at 4500 rpm. Big-load power that loves to work. It's as easy to pull over and start as most motors half its size—and thermostatic temperature control keeps it running at peak efficiency in any weather, on any water. Choice of props to fit boat and work. For constant, rugged duty, there's no finer outboard power—or more economical buy—than the stout-hearted Big Twin.

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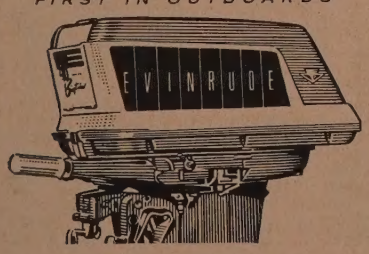


Dr. Larkin and R. D. Ladd Speak on Wise Water Use

Dr. Peter A. Larkin, director of the Institute of Fisheries at the University of British Columbia, will speak on "Fisheries and Water Resources Development" at the 44th general conference of the Pacific Northwest Trade Association at Sun Valley, Idaho, September 6.

The three-day conference will be devoted to efficient utilization of the water wealth of the Pacific Northwest on both sides of the international border.

Dr. Larkin, who holds degrees from the University of Saskatchewan and Oxford, has held a number of important positions as a fisheries biologist and as a scientific advisor to such bodies as the International Pacific Salmon Fisheries Commission.

Robert D. Ladd of Seattle, vice president and general manager of the Pacific Marine Supply Company, is another speaker, his subject to be "The Ultimate Resource."

Columbia River Chinook Run Better in August

Marked improvement in the Chinook salmon run in the Columbia River was manifest before the middle of August, with continued build-up toward the summer season's close late that month.

Catches as high as 1,000 lbs. per boat were reported, but 400 lbs. per boat per day was much more nearly the average.

Nylock Nylon Twine Reduced in Price

Heminway & Bartlett Manufacturing Company in August announced that the price of nylon twine has been substantially reduced. This price reduction in Nylock twine may be expected to be reflected in the price of bonded Nylock nylon fish nets.

According to W. S. Heminway, president of Heminway & Bartlett, more fishermen than ever will now be able to use nylon nets, whose exclusive, U. S. patented bonding process virtually assures the elimination of knot slippage. Also nets made of Nylock nylon last much longer due to their greater resistance to marine organisms, they are easier to handle and they require no drying and no preservatives.

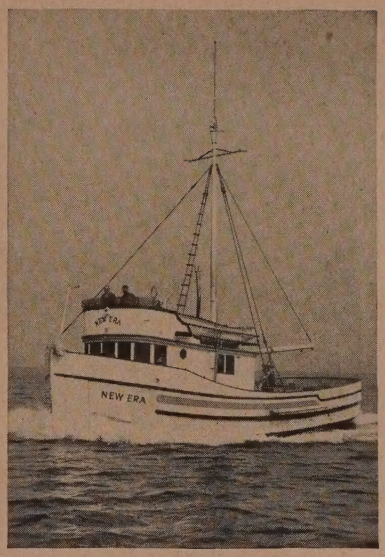
Two California Distributors Franchised for Barr Marine Diesels

Barr Marine Products Co. (Philadelphia) announces further expansion of its Diesel Division through the franchising of two West Coast distributors.

Jeffries Boats, Inc., 4160 Lincoln Blvd., Venice, will be exclusive Barr Diesel distributor for California from San Luis Obispo, Kern and San Bernardino counties to the Mexican border.

Douthit and Crane Boat Works, 5933 Redwood Highway, Santa Rosa, will be Barr's exclusive distributor for California for the territory north of San Luis Obispo, Kern and San Bernardino counties to the Oregon border.

Both firms will carry the Barr Marine 4 and 6 cylinder Diesels which are available with a wide selection of reverse and reduction gear combinations.



NEW ERA heads for Pacific halibut waters with Co-owners William Selset, Captain, and Reidar Selset, Chief Engineer, on the bridge.

Twin Disc Marine Gear

"works so smoothly you can't hear it when it's backing"

Capt. William Selset has been fishing the Pacific halibut waters for 47 years, the last 36 as skipper of his own boat. His 57-ft. schooner *New Era* could well serve as a model halibuter. She can carry 60,000 lbs. of iced fish and average 9.2 knots in day-in, day-out service.

Now in her ninth year of operation, *New Era* has just been repowered with a 195 hp Waukesha Resolute Engine. It drives through a new Twin Disc MG-512 Marine Gear with 4.15:1 ratio. Here's what Captain Selset had to say about this gear's performance following first trials in March:

"The Twin Disc Gear on our new engine works so smoothly you can't hear it when it's backing. We had another make of gear on the old engine, and the Twin Disc gear is not only much smoother but far more responsive. It's right there, now!"

TWIN DISC CLUTCH COMPANY, Racine, Wisconsin.

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CLUTCHES AND HYDRAULIC DRIVES
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FOR THIS FLEET OF FIVE... nothing but MICHIGAN PROPELLERS

The 63 ft. trawler, El Gringo, completely equipped and double-rigged, has successfully completed the long voyage from the yards of her builder, Conrad Industries, Inc., Morgan City, la., to her new home at San Salvador. There, with the four other vessels of the Atarraya fleet, she will work the shrimping grounds off the west coast. El Gringo was outfitted with only the finest, most modern equipment and once again, as with thousands of work and pleasure boats the world over, Michigan was asked to supply the propeller. Michalloy-K bronze, of which this 46/33 wheel was cast, is famous for its great strength and especially for its ability to resist salt and polluted water.

No matter what your requirements are, Michigan can provide you with a wheel that will give you the finest performance and unbelievably long life. See your Michigan dealer now, or write us for an expert FREE propeller recommendation for your particular craft.

REPAIR SERVICE Fast, sure, low cost... always use Michigan's nationwide prop repair service.

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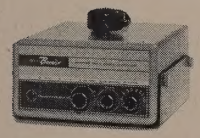
for the NEW *FULLY* TRANSISTORIZED RADIOTELEPHONES

Low cost, high performance sets *for all boats*



SKIPPER 202A... Radiotelephone. 5 channels and broadcast. 42 watts. Less than ⅓ the size of vacuum tube models with equal power. This is the set for boat owners who require the power of 26.5 watts output to the antenna.

CAPTAIN 250 . . . the finest radiotelephone ever built. The Captain 250—fully transistorized, 250 watt, 11 channels up to 8 MC. Broadcast band. Smaller. Lower battery drain than sets of ½ the power.

BENDIX CITIZENS BAND TRANSCEIVERS offer the finest short range performance. 5 channels. Inquire at your dealer now.

At last you can have the safety and convenience of high performance two-way voice communication with this revolutionary Bendix Skipper 303 transistorized 65 watt radiotelephone. It's small; requires no underwater ground through use of the exclusive TENNA-COUPLER, a special cable assembly providing an artificial ground for the system; has extremely low battery drain because of its transistorized power supply, receiver and transmitter modulator. In addition, it is completely self-contained for simplicity of installation.

With the Skipper 303 you can call anywhere in the world from wherever you are at sea. Call other boats or the Coast Guard in an emergency, or enjoy the finest entertainment broadcast reception.

The Skipper 303 has 5 channels and broadcast. It is the acknowledged ultimate in compact radiotelephones and puts a full 37 watts output to the antenna.

Accepted by F.C.C. for use in commercial boats carrying passengers.

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140 TONS OF TUNA IN A SINGLE SET!

Nick Marincovich and his crew of the **New Sea Rover**, purse seiner out of San Pedro, Calif., made this phenomenal catch with a MOMOI Hi-Tenacity Nylon Tuna net.

Capt. Marincovich says: "After trying many other brands of netting, I am now settling on Momoi Hi-Tenacity tuna netting—strong, easy to work with, and you can depend on it. It is always the same high quality."

Tuna fishing demands the best. Compare MOMOI Hi-Tenacity tuna webbing for uniform high quality. You can pay more, but you can't buy better!

MOMOI Hi-Tenacity Nylon Tuna Netting
made exclusively from Toray multi-filament yarns

¡140 toneladas de atún en una sola tirada de red! Esta fenomenal pesca la logró el Capt. Nick Marincovich del barco New Sea Rover, San Pedro, California, usando red MOMOI Hi-Tenacity Nylon.

Dice el Capt. Marincovich: "Al fin de probar muchas marcas, he determinado usar la red MOMOI Hi-Tenacity Nylon. Es fuerte, fácil de manejar, y siempre de la misma finísima calidad".

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